

at that time 7 a. m.; a station in longitude 90°, such as New Orleans, is then six hours from the sun, and its clocks therefore indicate 6 a. m.; Denver, on the one hundred and fifth meridian, is seven hours from the sun and has 5 a. m.; Carson City, on the one hundred and twentieth meridian, which is eight hours from the sun, has 4 a. m.

One of the great reforms of the last twenty years has been silently advancing, until now it pervades all civilized nations. This amounts virtually to an international agreement that longitude and time shall be, as far as practicable, referred to the Greenwich meridian. As with railroads, so now with individuals, watches and clocks are no longer set to so-called astronomical local time, but to the time appropriate to the nearest whole hour from Greenwich. Thus, in the Atlantic States, we use seventy-fifth meridian time, but in the Mississippi watershed ninetieth meridian time, except, perhaps, in the western portion, where the one hundred and fifth meridian is adopted.

For many years meteorological observations have been made simultaneously in all parts of the globe, and in the majority of cases at 1 p. m., Greenwich time, but in a few cases at noon.

#### WHIRLING ALTO-CUMULUS CLOUDS.

The Weather Bureau Observer at San Diego, Cal., forwards the following extract from his daily journal for February 20, 1898:

An hour before sunset, or about 7:45 p. m., a narrow strip of fog was observed on the western horizon; above this, extending probably 35°, was a bank of alto-cumulus cloud. From the upper edge of this cloud whirling alto-cumulus took their flight one by one. These peculiar clouds, mentioned by Mr. McAdie in the MONTHLY WEATHER REVIEW, were beautifully formed and their rotary motion was almost apparent, the whirl from the time of formation to their dissolution in the upper region of alto-cirrus cloud lasted but four or five minutes.

#### CORRECTIONS.

Mr. R. DeC. Ward, who has lately returned from a visit to the Harvard College observatory meteorological stations in Peru, kindly calls attention to an error in the MONTHLY WEATHER REVIEW for December, in the foot-note on page 540. The altitude of the station at Echarati is 3,300 feet; the altitude, 11,378, as given in this foot-note, belongs to the station at Cuzco.

On page 541, line 4, for "1875" read "1895."

Mr. Morrill calls attention to the legend on Chart IV of the JANUARY REVIEW: The station temperatures are reduced to sea level by using a date that varies with the season of the year; it is 2° on the average for the whole year, but is 1.5° during December, January, and February.

#### RECENT EARTHQUAKES.

Prof. E. W. Morley, of Cleveland, Ohio, reports that no seismic disturbance was recorded there during February. There was also none recorded at the Weather Bureau on the Marvin seismoscope.

The following earthquakes have been reported:

2d, near Brinnon, Wash., slight shock of earthquake at 6:30 p. m.

20th, Corinne, Utah, earthquake at 5 p. m.

22d, Ellensburg, Wash., earthquake at 5:30 a. m.

#### FRANK BURKE.

Frank Burke, Local Forecast Official and Director of the Kentucky Section of the Climate and Crop Service, Weather Bureau, died at the home of his father, William H. Burke, at Watertown, Mass., on February 3, 1898, at the age of 36. He was born at Lowell, Mass., and was educated in the public schools of Boston and the Massachusetts Institute of Technology. He entered the Signal Service (now Weather Bureau) on May 11, 1880, and, after pursuing the prescribed course of instruction at Fort Whipple, Va., was assigned to duty as station assistant. For his good work he was successively promoted to the grades of first-class private, corporal, and sergeant in the military-meteorological service, and on July 1, 1891, he (with others) was transferred to the civilian position of observer in the Weather Bureau, by the Act of Congress transferring the meteorological duties of the Signal Service to the Department of Agriculture. In December, 1892, he was advanced to the grade of local forecast official, and on January 1, 1897, he received promotion to the important position which he held at the time of his death. He served at the following-named stations: Des Moines, Iowa; Helena, Fort Missoula, Crow's Nest, and Fort Maginnis, Mont.; Columbus, Ohio, and Louisville, Ky.; at the latter point he founded the Kentucky Section of the Climate and Crop Service.

Mr. Burke took an ardent, active, and intelligent interest in the work to which he gave so many years of his life, and by his death the Weather Bureau sustains the loss of one of its most trustworthy, efficient, and valued officials.

#### WILLIAM E. BUTLER.

Mr. William E. Butler, Observer, Weather Bureau, died on February 25, 1898. This announcement will be received with sadness by all who knew him.

Mr. Butler entered the meteorological service by enlistment in the Signal Corps in January, 1886, and was assigned to Fort Myer, Va., for instruction, thence to the Central Office in Washington, D. C., for clerical duty for a short period. In October, 1886, he was transferred to the station at Chicago, Ill., as assistant, following which he served in the same capacity at Jacksonville, Fla., Memphis, Tenn., and Atlanta, Ga. In March, 1892, he was placed in charge of the station at Vicksburg, Miss., and in December, of the same year, he was transferred to Hannibal, Mo., and placed in charge of the station there. He remained at Hannibal until August, 1895, when poor health made it necessary for him to seek a change of climate, and he was sent to the Denver, Colo., station as assistant. He remained there until June, 1896, when he was transferred to Omaha, Nebr., as assistant. He remained at Omaha only a few months when failing health again made it necessary for him to secure an assignment to a station of higher altitude. Accordingly he was sent to Salt Lake City, Utah, as an assistant. Here he faithfully performed his duties until September 28, 1897, when his weak physical condition compelled him to quit work. He went to Denver, Colo., to be with friends and receive medical treatment, where he continued to grow weaker, although hopeful to the last.

#### METEOROLOGICAL TABLES AND CHARTS.

By A. J. HENRY, Chief of Division of Records and Meteorological Data.

Table I gives, for about 130 Weather Bureau stations making two observations daily and for about 20 others making only one observation, the data ordinarily needed for climatological studies, viz, the monthly mean pressure, the monthly means and extremes of temperature, the average con-

ditions as to moisture, cloudiness, movement of the wind, and the departures from normals in the case of pressure, temperature, and precipitation, the total depth of snowfall, and the mean wet-bulb temperatures. The altitudes of the instruments above ground are also given.

Table II gives, for about 2,700 stations occupied by voluntary observers, the highest maximum and the lowest minimum temperatures, the mean temperature deduced from the average of all the daily maxima and minima, or other readings, as indicated by the numeral following the name of the station; the total monthly precipitation, and the total depth in inches of any snow that may have fallen. When the spaces in the snow column are left blank it indicates that no snow has fallen, but when it is possible that there may have been snow of which no record has been made, that fact is indicated by leaders, thus (....).

Table III gives, for about 30 stations furnished by the Canadian Meteorological Service, Prof. R. F. Stupart, director, the means of pressure and temperature, total precipitation and depth of snowfall, and the respective departures from normal values, except in the case of snowfall.

Table IV gives, for 26 stations selected out of 113 that maintain continuous records, the mean hourly temperatures deduced from the Richard thermographs described and figured in the Report of the Chief of the Weather Bureau, 1891-92, p. 29.

Table V gives, for 26 stations selected out of 104 that maintain continuous records, the mean hourly pressures as automatically registered by Richard barographs, except for Washington, D. C., where Foreman's barograph is in use. Both instruments are described in the Report of the Chief of the Weather Bureau, 1891-92, pp. 26 and 30.

Table VI gives, for about 130 stations, the arithmetical means of the hourly movements of the wind ending with the respective hours, as registered automatically by the Robinson anemometer, in conjunction with an electrical recording mechanism, described and illustrated in the Report of the Chief of the Weather Bureau, 1891-92, p. 19.

Table VII gives, for all stations that make observations at 8 a. m. and 8 p. m., the four component directions and the resultant directions based on these two observations only and without considering the velocity of the wind. The total movement for the whole month, as read from the dial of the Robinson anemometer, is given for each station in Table I. By adding the four components for the stations comprised in any geographical division the average resultant direction for that division can be obtained.

Table VIII gives the total number of stations in each State from which meteorological reports of any kind have been received, and the number of such stations reporting thunderstorms (T) and auroras (A) on each day of the current month.

Table IX gives, for about 70 stations, the average hourly sunshine (in percentages) as derived from the automatic records made by two essentially different types of instruments, designated, respectively, the thermometric recorder and the photographic recorder. The kind of instrument used at each station is indicated in the table by the letter T or P in the column following the name of the station.

Table X gives a record of rains whose intensity at some period of the storm's continuance equaled or exceeded the following rates:

Duration, minutes..	5	10	15	20	25	30	35	40	45	50	60	80	100	120
Rates pr. hr. (ins.)..	3.00	1.80	1.40	1.20	1.08	1.00	0.94	0.90	0.86	0.84	0.75	0.60	0.54	0.50

In the northern part of the United States, especially in the colder months of the year, rains of the intensities shown in the above table seldom occur. In all cases where no storm of sufficient intensity to entitle it to a place in the full table has occurred, the greatest rainfall of any single storm has been given, also the greatest hourly fall during that storm.

Table XI gives the record of excessive precipitation at all stations from which reports are received.

#### NOTES EXPLANATORY OF THE CHARTS.

Chart I.—Tracks of centers of high pressure. The roman letters show number and order of centers of high areas. The figures within the circles show the days of the month; the letters *a* and *p* indicate, respectively, the 8 a. m. and 8 p. m., seventy-fifth meridian time, observations. The queries (?) on the tracks show that the centers could not be satisfactorily located. Within each circle is given the highest barometric reading reported near the center. A blank indicates that no reports were available. A wavy line indicates the axis of a ridge of high pressure.

Chart II.—Tracks of centers of low pressure. The roman letters show number and order of centers of low areas. The figures within the circles show the days of the month; the letters *a* and *p* indicate, respectively, the 8 a. m. and 8 p. m., seventy-fifth meridian time, observations. The queries (?) on the tracks show that the centers could not be satisfactorily located. Within each circle is given the lowest barometric reading reported near the center. A blank indicates that no reports were available. A wavy line indicates the axis of a trough or long oval area of low pressure.

Chart III.—Total precipitation. The scale of shades showing the depth of rainfall is given on the chart itself. For isolated stations the rainfall is given in inches and tenths, when appreciable; otherwise, a "trace" is indicated by a capital T, and no rain at all, by 0.0.

Chart IV.—Sea-level isobars and isotherms, and resultant winds. The wind directions on this Chart are the computed resultants of observations at 8 a. m. and 8 p. m., daily; the resultant duration is shown by figures attached to each arrow. The temperatures are the means of daily maxima and minima and are reduced to sea level. The pressures are the means of 8 a. m. and 8 p. m. observations, daily, and are reduced to sea level and to standard gravity. The reduction for 30 inches of the mercurial barometer, as shown by the marginal figures for each degree of latitude, has already been applied.

Chart V.—Hydrographs for seven principal rivers of the United States.

Chart VI.—Surface temperatures; maximum, minimum, and mean. Lines of equal monthly mean temperature in red; lines of equal maximum temperatures (broken) in black; and lines of equal minimum temperature (dotted) also in black.

Chart VII.—Percentage of sunshine. The average cloudiness at each Weather Bureau station is determined by numerous personal observations during the day. The difference between the observed cloudiness and 100, it is assumed, represents the percentage of sunshine, and the values thus obtained have been used in preparing Chart VII.

Chart VIII.—The total snowfall. This is based on the reports from all available observers and shows the depth of the snowfall during the month in inches. In general, the depth is shown by lines and areas of equal snowfall, but in some cases figures are also given for special localities.

Chart IX.—Depth of snow on ground. This chart is based essentially upon reports from regular and special observers and shows the depth of snow lying on the ground at the end of the month, which is, therefore, the accumulated excess of the snowfall over its loss by melting, evaporation, and settling.

Chart X.—Curves of the meteorological elements at the Royal Alfred Observatory, Mauritius, during the passage of a cyclone on December 4 to 6, 1897.

TABLE I.—Climatological data for Weather Bureau Stations, February, 1898.

Stations.	Elevation of instruments.		Pressure, in inches.		Temperature of the air, in degrees Fahrenheit.								Precipitation, in inches.		Wind.		Cloudiness.		Average cloudiness.		Total snowfall.										
	Barometer above sea level, feet.	Thermometers above ground.	Anemometer above ground.	Mean actual, 8 a.m. and 8 p.m. + 2°.	Mean reduced.	Departure from normal.	Mean max. and min., + 2°.	Maximum.	Departure from normal.	Mean maximum.	Date.	Minimum.	Mean minimum.	Greatest daily range.	Mean wet thermometer.	Mean temperature of the dew point.	Mean relative humidity, per cent.	Total.	Departure from normal.	Days with 0°, or more.	Total movement, miles.	Prevailing direction.	Miles per hour.	Direction.	Date.	Clear days.	Cloudy days.	Average cloudiness, tenths.	Total snowfall.		
New England.																															
Eastport.	76	69	74	29.98	30.07	+ .11	28.0	+ 6.0	42	12	33	4	3	23	23	26	23	22	6.37	+ 2.7	16	9,764	n.w.	68	ne.	1	6	4	18	7.423	.5
Portland, Me.	108	81	89	29.92	30.03	+ .03	27.6	+ 3.0	50	10	34	— 4	3	21	24	25	23	22	7.61	+ 4.1	10	5,491	n.w.	38	sw.	5	8	5	15	6.918	.0
Northfield.	872	15	65	29.10	30.10	+ .04	21.6	+ 5.6	47	12	30	— 21	3	13	34	34	19	16	3,82	+ 1.5	14	5,893	s.	54	n.w.	16	4	8	16	7.243	.8
Boston.	125	115	181	29.92	30.06	+ .01	33.8	+ 4.8	59	10	40	5	26	33	29	29	26	4,81	+ 1.3	10	7,733	w.	50	ne.	1	9	5	14	6.911	.5	
Nantucket.	14	48	54	30.05	30.06	- .03	34.0	+ 3.0	50	12	40	22	22	30	31	28	28	8.17	- 1.0	7,607	n.w.	50	se.	21	11	6	12	5.8	1.7		
Woods Hole.	22	51	57				32.5	+ 2.8	49	12	38	9	27	28	27	18	18	4.14	+ 0.5	10	9,206	se.	70	n.w.	1	13	6	9	4.7	6.4	
Vineyard Haven.	20						35.6	+ 3.3	56	12	42	10	28	28	29	33	33	4.51	+ 1.4	11	w.	10	10	6	12	1.1					
Block Island.	27	39	48	30.05	30.08	+ .01	33.3	+ 2.5	51	12	38	5	28	28	31	27	29	5.20	+ 0.8	12	10,007	n.w.	66	e.	20	12	10	6	4.5	5.4	
Narragansett Pier.		10					30.8	+ 1.7	51	10	39	22	22	30	31	28	28	7.42	+ 2.9	9		s.	...	...	15	4	9	9	12.0		
New Haven.	107	118	140	29.96	30.08	- .01	31.2	+ 2.4	51	10	38	2	24	24	23	24	24	4.55	+ 0.4	13	6,452	n.	40	w.	16	10	5	13	5.6	6.6	
Mid. Atlan. States.							34.5	0.0																							
Albany.	97	84	113	29.99	30.11	+ .03	28.0	+ 3.8	52	10	35	— 6	5	21	28	24	20	28	3.57	+ 0.9	11	5,566	s.	34	se.	5	7	6	15	7.023	.5
Binghamton.	875	79	90				27.5	+ 3.6	54	12	34	— 3	21	35	27	27	25	7.5	2.51	+ 1.5	16	4,609	n.w.	30	w.	16	5	10	18	6.617	.7
New York.	314	298	326	29.74	30.09	- .03	33.0	+ 1.5	60	10	39	27	27	30	27	25	25	4.06	+ 0.3	14	8,556	w.	48	w.	16	10	6	12	5.4	1.8	
Harrisburg.	377	94	104	29.71	30.14	- .02	31.8	+ 0.7	57	11	38	6	24	26	25	27	21	6.88	+ 1.2	8	5,893	w.	48	n.w.	16	11	9	8	5.4	1.8	
Philadelphia.	117	168	184	29.98	30.11	+ .02	35.6	+ 2.1	61	11	43	8	28	28	24	31	26	7.3	2.80	+ 0.4	10	6,915	n.w.	41	n.w.	16	12	8	8	4.8	0.9
Atlantic City.	52	68	76	30.06	30.12	+ .02	34.6	+ 0.7	59	10	41	14	22	22	23	28	28	8.18	+ 1.5	8	7,847	w.	49	n.w.	16	15	8	16	5.4	0.9	
Cape May.	24	52	70	30.11	30.13		35.3	- 0.4	50	12	40	14	22	22	23	27	30	6.5	1.32	+ 2.9	6	3,665	w.	28	sw.	16	15	6	8	4.4	T.
Baltimore.	123	68	82	29.99	30.13	- .01	35.2	- 1.0	65	12	43	10	22	22	23	28	23	6.65	+ 1.3	6	3,665	w.	28	sw.	16	12	8	8	4.4	T.	
Washington.	112	59	76	30.02	30.15	+ .01	35.0	- 0.8	67	12	44	2	24	24	23	28	23	6.9	1.64	+ 1.7	5	5,032	n.w.	46	n.w.	16	12	8	8	4.7	T.
Cape Henry.	5	34					40.1	- 3.8	70	12	47	18	* 27	41	31	25	69	0.74	- 2.8	5	3,164	n.w.	46	n.w.	15	18	7	3	3.2	0.1	
Lynchburg.	685	88	88	29.40	30.17	+ .03	37.5	- 2.5	73	10	48	8	32	33	31	36	33	1.48	+ 2.4	7	5,935	n.w.	59	n.w.	15	19	6	16	5.4	T.	
Norfolk.	57	88	93	30.09	30.16	+ .02	40.8	- 2.0	69	12	49	15	32	33	34	34	34	1.05	+ 0.5	6	3,697	n.	31	w.	15	15	7	6	4.1	T.	
Richmond.	144	98	105				46.3	- 3.3										69	1.30	- 2.5											
S. Atlantic States.																															
Charlotte.	773	68	70	29.31	30.16	+ .01	41.5	- 3.5	69	12	51	12	32	32	30	34	25	6.81	- 3.7	3	4,282	ne.	40	w.	15	14	7	7	3.8	T.	
Hatteras.	11	17	36	30.13	30.14	+ .01	44.6	- 2.0	66	12	50	22	22	32	41	39	33	1.75	- 2.7	7	10,018	n.	52	w.	16	17	4	7	4.2	T.	
Kittyhawk.	9	12	30				42.9	- 3.1	70	12	50	18	28	33	36	36	36	2.45	- 1.3	6											
Raleigh.	875	98	101	29.77	30.18	- .00	40.8	- 3.1	70	11	50	14	22	22	23	28	27	6.4	0.42	- 3.6	5	3,547	n.	33	n.w.	15	13	5	10	4.5	
Wilmington.	78	82	90	30.08	30.17	+ .03	45.6	- 4.2	70	12	55	18	32	32	31	40	35	7.5	3.27	- 0.6	5	5,28	n.	51	w.	16	16	9	14	3.4	
Charleston.	48	14	92	30.14	30.19	+ .04	50.1	- 2.7	76	12	57	26	32	32	33	43	42	6.51	- 2.8	4	6,771	n.	40	n.w.	16	15	6	13	4.4		
Columbia.							45.0	- 4.2	76	12	57	14	34	34	36	36	36	0.60	- 3.6	5											
Augusta.	180	89	103	29.97	30.17	+ .03	46.1	- 4.3	76	12	58	19	34	34	36	36	36	0.53	- 3.4	5	4,350	w.	39	w.	15	15	6	9	3.6		
Savannah.	82	63	89	30.08	30.18	+ .01	51.2	- 3.1	76	18	61	23	41	26	43	37	38	38	0.56	- 2.5	4	5,738	n.w.	36	n.w.	15	15	6	7	3.7	
Jacksonville.	43	69	84	30.13	30.18	+ .03	55.6	- 2.8	76	12	65	27	56	29	49	49	49	2.10	- 1.0	6	4,805	n.	30	sw.	17	17	6	2	3.5		
Florida Peninsula.							64.0	- 3.1	80	20	71	40	57	24	57	53	53	0.90	- 1.4	5	6,915	n.w.	29	s.	20	18	13	13	2.6		
Jupiter.	28	13	30	30.11	30.14	.00	64.0	- 3.1	80	20	71	51	65	24	65	65	65	0.05	- 1.6	5	6,915	n.w.	29	s.	18	18	13	13	2.6		
Key West.	22	45	50	30.12	30.14	+ .02	68.6	- 2.8	81	20	72	52	65	22	65	59	59	0.22	- 1.4	3	8,318	n.e.	34	n.w.	19	16	10	10	4.0		
Tampa.	36	60	67	30.13	30.17	+ .03	59.3	- 3.5	80	19	70	31	49	33	49	49	49	2.15	- 1.7	6	4,509	n.w.	28	n.w.	19	16	10	10	2.6		
East Gulf States.							58.0	- 2.6																							
Atlanta.	1,131	92	126	28.97	30.20	+ .02	43.2	- 4.8	67	11	52	13	35	35	30	37	30	6.62	- 4.3	5	6,883	n.w.	36	n.w.	15	14	5	9	4.3	T.	
Pensacola.	56	78	90	30.19	30.19	+ .03	58.2	- 3.6	69	15	60	29	46	23	44	44	44	5.97	- 2.1	7	6,049	n.e.	36	sw.	17	13	9	5	3.9		
Mobile.	57	88	96	30.13	30.20	+ .05	52.6	- 2.2	74	15	62	29	44	29	47	44	44	5.58	- 0.9	9	4,788	n.	36	se.	17	13	10	7	3.5		
Montgomery.	221	100	112	29.94	30.18	+ .02	49.2	- 3.5	74	10	59	23	39	39	32	42	36	6.7	2.37	3	4,524	n.	33	se.	11	17	4	7			

TABLE I.—*Climatological data for Weather Bureau Stations, February, 1898—Continued.*

Stations.	Elevation of instruments		Pressure, in inches.												Temperature of the air, in degrees Fahrenheit.												Wind.																					
	Barometer above sea level, feet.		Thermometers above ground.						Anemometers above ground.						Mean actual, S. S. m. and 8 p.m. +.2.						Mean max. and min. +.2.		Departure from normal.		Maximum.		Date.		Mean maximum.		Minimum.		Mean minimum.		Greatest daily range.		Mean wet thermometer.		Mean temperature of the dew point.		Mean relative humidity, per cent.		Total movement, miles.		Prevailing direction.		Maximum velocity.	
<i>Up. Miss. Val.—Con.</i>																																																
Dubuque . . . . .	696	101	109	29.30	30.10	—	.00	24.1	+ 1.5	50	10	32	—	4	1	17	26	32	19	85	2.01	+ 0.6	11	5,708	n.w.	35	n.w.	2	12	9	10	5.4	18.5															
Keokuk . . . . .	614	64	78	29.43	30.13	—	.02	30.8	+ 2.5	61	10	30	—	4	1	33	35	23	77	1.16	+ 0.6	8	6,220	n.w.	35	n.w.	5.2	5.2	5.2	0.4																		
Cairo . . . . .	359	87	93	29.76	30.16	—	.04	40.4	+ 1.0	68	10	48	—	4	1	33	26	32	76	1.18	+ 0.3	10	6,666	n.w.	36	s.s.	15	4	12	9	5.6	0.4																
Springfield, Ill. . . . .	644	83	92	29.40	30.12	—	.01	32.4	+ 2.1	66	10	39	0	3	3	26	32	24	74	2.70	+ 0.7	10	8,004	n.w.	34	s.s.	23	11	5	12	5.3	0.6																
Hannibal . . . . .	534	75	107	29.17	30.16	—		34.0	+ 3.5	63	8	43	2	2	2	26	32	32	69	1.60	+ 0.8	11	7,504	n.w.	36	s.s.	24	11	5	12	5.3	0.6																
St. Louis . . . . .	567	111	210	29.52	30.15	+	.02	38.4	+ 3.3	71	10	47	6	3	3	30	32	32	74	1.71	+ 1.1	10	7,906	w.	42	sw.	14	8	8	12	5.9	0.8																
<i>Missouri Valley.</i>																																																
Columbia . . . . .	4	84	.....	35.7	.....	—		—	+ 2.9	67	8	46	2	3	3	25	25	42	.....	1.84	+ 0.7	6	7,409	n.w.	35	n.w.	9	7	12	5.5	0.3																	
Kansas City . . . . .	963	73	95	29.10	30.17	+	.03	35.4	+ 4.4	65	16	45	4	4	2	26	33	31	26	1.14	+ 0.7	4	6,253	n.w.	35	n.w.	11	11	5	12	5.6	0.9																
Springfield, Mo. . . . .	1,324	100	103	28.69	30.14	—	.02	38.2	—	60	16	47	—	6	2	25	33	33	23	1.68	+ 1.8	10	8,533	se.	37	w.	13	8	13	5.0	0.9																	
Topeka . . . . .	81	.....	.....	—																																												
Lincoln . . . . .	1,193	74	84	28.80	30.14	—		31.8	+ 8.4	58	16	41	—	1	2	21	32	26	22	1.78	+ 0.2	4	8,066	n.w.	44	n.w.	12	11	5	12	4.9	1.7																
Omaha . . . . .	1,109	92	97	28.91	30.14	—	.01	29.9	+ 4.9	63	14	38	—	1	2	22	32	26	20	0.99	+ 0.1	8	5,483	n.w.	27	n.w.	2	18	8	12	4.7	2.5																
Sioux City . . . . .	1,139	96	104	28.81	30.11	—		23.8	+ 4.8	47	14	34	—	5	5	23	32	26	22	0.37	+ 0.2	4	9,530	n.w.	45	n.w.	10	11	5	12	4.8	0.6																
Pierre . . . . .	1,480	50	62	28.47	30.11	—	.06	28.2	+ 12.8	64	6	43	—	5	5	23	18	15	13	0.13	+ 0.2	4	6,288	se.	35	n.w.	1	8	13	2.6	4.6	0.7																
Huron . . . . .	1,306	56	67	28.67	30.16	—	.01	22.4	+ 10.4	54	6	34	—	9	9	10	39	18	14	0.29	+ 0.4	5	8,729	n.w.	39	n.w.	13	11	5	12	4.1	2.2																
Yankton . . . . .	1,234	53	58	.....	.....	—		30.1	+ 9.2	73	28	36	—	5	5	23	34	16	21	0.74	+ 0.4	6	5,519	n.w.	36	n.w.	17	5	6	10	4.0	8.3																
<i>Northern Slope.</i>																																																
Havre . . . . .	2,494	46	47	27.30	30.06	—	.10	22.8	+ 9.6	58	7	47	—	12	15	11	45	19	15	0.80	+ 0.4	4	7,174	sw.	36	sw.	5	9	10	9	5.5	0.8																
Miles City . . . . .	2,372	41	49	27.48	30.09	—	.07	27.2	+ 11.0	54	12	38	—	9	16	11	39	23	20	0.35	+ 0.2	5	4,608	s.	40	n.w.	12	11	5	12	5.1	1.7																
Helena . . . . .	4,106	88	93	25.80	30.11	—	.04	34.2	+ 12.5	55	15	43	—	1	1	26	29	29	19	0.56	+ 0.2	6	6,171	sw.	26	n.w.	13	13	5	12	5.1	0.1																
Rapid City . . . . .	3,251	45	50	26.60	30.08	—	.09	32.9	+ 11.6	60	6	46	—	6	6	25	26	18	13	0.24	+ 0.4	6	6,117	w.	36	n.w.	19	11	5	12	5.0	1.1																
Cheyenne . . . . .	6,105	58	60	23.98	30.18	—	.01	32.8	+ 5.5	58	21	45	—	3	2	20	42	25	9	0.42	+ 0.3	3	8,534	n.w.	49	n.w.	14	10	5	12	4.8	0.6																
Lander . . . . .	5,372	28	36	24.64	30.20	—	.04	27.9	+ 6.1	52	14	41	—	4	4	25	40	36	21	0.64	+ 0.6	1	6,281	sw.	36	sw.	21	10	5	12	4.7	1.7																
North Platte . . . . .	2,820	43	52	27.12	30.18	—	.02	33.6	+ 8.3	62	16	45	—	3	2	22	36	28	21	0.66	+ 0.2	1	6,171	n.w.	38	n.w.	4	14	9	12	4.1	2.0																
<i>Middle Slope.</i>																																																
Denver . . . . .	5,290	70	151	24.73	30.17	—	.01	37.8	+ 5.6	65	25	51	10	10	10	25	37	29	17	4.9	+ 0.68	+ 0.2	4	5,119	s.	53	w.	4	11	13	4	4.6	6.8															
Pueblo . . . . .	4,713	74	81	25.28	30.18	—		38.1	+ 8.0	69	51	46	12	19	23	27	47	30	17	4.6	+ 0.6	4	4,944	n.w.	43	n.w.	4	13	11	4	4.4	4.4																
Concordia . . . . .	1,398	42	47	28.60	30.16	—	.01	34.4	+ 6.2	63	16	44	6	6	2	24	34	30	26	0.32	+ 0.6	4	4,657	s.	26	n.w.	23	11	5	12	4.2	2.1																
Dodge City . . . . .	2,504	44	52	27.45	30.15	—	.03	38.2	+ 6.4	70	16	51	11	11	2	25	37	30	25	69	0.70	+ 0.1	1	6,464	n.	34	s.	15	18	7	3	3.5	7.2															
Wichita . . . . .	1,351	78	85	26.67	30.15	—	.04	39.0	+ 7.2	72	16	50	12	2	2	25	37	32	25	64	3.04	+ 1.8	3	6,301	s.	30	n.	9	22	5	12	4.7	1.7															
Oklahoma . . . . .	1,218	54	62	28.82	30.15	—	.04	44.1	+ 4.0	78	25	56	18	3	3	32	38	38	33	71	2.37	+ 1.2	3	7,737	n.	44	n.w.	9	21	3	4	2.7	2.7															
<i>Southern Slope.</i>																																																
Abilene . . . . .	1,749	45	54	28.30	30.17	—	.04	51.1	+ 5.2	80	25	69	21	3	3	39	35	43	35	64	1.08	+ 0.3	2	6,578	sw.	36	sw.	4	18	8	2	2.5	3.5															
Amarillo . . . . .	3,691	54	61	26.28	30.14	—	.02	41.9	+ 6.7	75	25	55	19	3	3	28	40	33	21	52	0.82	+ 0.4	2	11,133	n.	48	n.	2	20	5	12	2.9	3.5															
<i>Southern Plateau.</i>																																																
El Paso . . . . .	3,767	10	110	26.23	30.09	—	.01	51.8	+ 2.4	79	26	67	24	3	3	36	38	39	19	34	0.04	+ 0.4	1	6,800	n.w.	44	w.	18	16	11	1	2.6	3.1															
Santa Fe . . . . .	6,998	47	50	23.27	30.14	—		36.6	+ 4.6	58	16	45	17	3	3	26	28	29	19	53	0.30	+ 0.5	0	3,600	ne.	26	n.w.	19	20	8	12	2.1	2.1															
Phoenix . . . . .	1,073	47	57	28.85	30.09	—		58.8	+ 4.5	81	27	74	36	10	10	44	38	46	32	41	0.00	+ 0.5	0	2,224	w.	17	n.	3	20	7	1	2.1	1.7															
Yuma . . . . .	139	16	50	23.86	30.01	—	.04	62.0	+ 3.2	84	27	76	40	20	20	25	35	31	37	0.54	+ 0.5	7	4,502	n.	30	n.	9	22	5	12	5.9	0.9																
<i>Middle Plateau.</i>																																																
Carson City . . . . .	4,720	88	92	25.28	30.12	—		40.6	+ 4.3	65	13	53	20	9	9	28	37	34	23	55	0.58	+ 0.5	7	6,413	sw.	46	s.	24	19	19	2	4.8	4.2															
Winnemucca . . . . .	4,340	59	70	25.72	30.18	—	.03	47.4	+ 4.9	62	14	48	14	6	3	27	32	34	30	73	0.43	+ 0.5	7	6,800	s.	46	s.	16	9	9	12	5.5	0.9															
Salt Lake City . . . . .	4,344	83	90	25.75																																												

NOTE.—The data at stations having no departures are not used in computing the district averages. Letters of the alphabet denote number of days missing from the record. \*Two or more dates. †Received too late to be considered in departures, etc.

TABLE II.—*Meteorological record of voluntary and other cooperating observers, February, 1898.*

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.	
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.
<i>Alabama.</i>																	
Alco t.	o	o	o	Ins.	Ins.	Arizona—Cont'd.	o	o	o	Ins.	Ins.	California—Cont'd.	o	o	o	Ins.	Ins.
Ashville t.	76	19	50.4	6.82		Snowflake.	64	9	36.6	0.20	3.7	Crescent City L. H.	... .	... .	... .	12.80	12.27
Bermuda t.	72	14	43.4	0.80	T.	Strawberry.	65	20	41.0	0.59		Daunt.	76	27	54.7	0.62	
Birmingham t.	77	20	50.6	4.29	T.	Sulphur Spring Valley.	... .	... .	... .	0.06		Delta *8.	74	30	42.4	13.55	
Bridgeport t.	73	16	47.0	1.15	0.5	Tombstone.	74	32	52.8	T.		Descanso *5.	72	23	50.8	0.89	
Citronelle t.	72	27	53.6	4.75		Tuba.	63	0	34.0	0.12		Drytown.	74	31	49.6	4.64	
Clanton t.	70	20	46.0	0.39	T.	Tucson t.	83	32	57.2	0.00		Dunningan *3.	72	35	47.7	3.24	
Daphne t.	75	25	51.6	4.83		Walnut Grove.	... .	... .	... .	0.18		Durham *1.	70	36	53.5	5.54	
Decatur t.	71	10	41.4	1.13	T.	Whipple Barracks t.	70	19	42.9	0.17		East Brother L. H.	... .	... .	... .	2.55	
Demopolis.	... .	... .	... .	1.64		White Hills.	75	33	54.0	0.60		Edmonton *1.	64	22	38.4	12.74	28.0
Eufaula t.	75	18	47.8	2.01		Willcox *8.	65	30	42.1	0.00		Elsinore.	89	30	56.8	0.15	
Eufaula b.	... .	... .	... .	2.28		Williams.	60	8	35.5	0.30	3.0	Escondido.	80	27	52.2	0.68	
Florence t.	73	14	43.8	1.89								Fordyce Dam.	... .	... .	... .	7.78	61.0
Flowers t.	73	24	48.2	1.67	T.							Fort Bragg t.	... .	... .	... .	7.50	
Fort Deposit.	73	22	48.2	3.25								Fort Ross.	69	37	50.8	12.94	
Gadsden.	70	14	45.0	0.71								Fort Tejon.	... .	... .	... .	1.55	
Goodwater.	71	18	44.0	0.75								Georgetown.	70	30	47.6	8.83	
Greensboro t.	75	21	47.3	1.77	T.							Goshen *2.	76	32	51.6	0.93	
Hamilton.	70	15	42.5	1.49								Grand Island *2.	70	37	52.5	2.51	
Healing Springs t.	78	17	50.7	4.15	T.							Grass Valley.	... .	... .	... .	8.64	
Hightown Home t.	73	24	50.7	2.89	T.							Greenville t.	68	20	40.9	7.97	9.5
Jasper.	74	14	42.1	0.95	T.							Healdsburg *1.	68	33	49.6	8.71	
Livingston.	74	21	48.2	2.18	T.							Hill Ranch.	... .	... .	... .	1.45	
Lock No. 4.	70	16	41.6	0.69								Hollister.	77	29	52.7	1.04	
Madison Station t.	71	10	42.1	1.43								Humboldt L. H.	... .	... .	... .	8.25	
Marion t.	73	20	47.2	1.33	T.							Indio *2.	89	39	58.8	0.00	
Mount Willing t.	79	18	50.9	2.80								Iowa Hill *1.	68	33	45.0	8.10	
Newbern t.	74	20	47.4	2.01								Jackson.	74	30	49.6	4.91	
Newburg.	... .	... .	... .	0.98	T.							Jolon.	... .	... .	... .	2.10	
Newton t.	74	19	47.0	2.68								Keene *8.	65	28	45.9	0.75	
Oneonta.	67	12	42.5	0.84	T.							Kennedy Gold Mine.	71	32	49.3	6.05	
Opelika t.	73	18	49.3	1.85								Kernville.	... .	... .	... .	0.85	
Oxana t.	68	12	43.2	0.80	1.0							King City *8.	78	32	48.7	1.30	
Pineapple.	70	15	43.7	4.75	T.							Kingsburg *3.	70	33	52.9	0.94	
Pushmataha t.	76	21	49.8	3.24	T.							Kono Tayee.	64	34	48.0	4.19	
Riverton t.	73	12	41.1	2.64								Lagrange *5.	77	32	55.8	1.92	
Rockmills t.	82	14	48.2	1.05								Laporte *1.	59	18	36.8	13.04	61.5
Scottsboro t.	66	14	40.7	1.06	T.							Las Fuentes Ranch.	... .	... .	... .	1.03	
Selma t.	79	22	47.9	2.19								Lemoore *4.	72	34	52.8	0.43	
Sturdevant.	... .	... .	... .	1.14								Lick Observatory.	65	27	42.8	4.16	0.5
Talladega.	71	17	44.8	0.77	T.							Limekiln.	78	36	55.3	... .	
Tallassee.	... .	... .	... .	1.91								Lime Point L. H.	... .	... .	... .	2.50	
Thomasville.	74	22	48.0	3.35	T.							Lodi.	74	29	52.6	1.71	
Tuscaloosa t.	70	22	45.9	1.46								Los Alamos.	... .	... .	... .	0.64	
Tuscumbia.	70	14	47.5	2.02								Los Gatos b.	67	37	50.4	6.88	
Union t.	75	18	47.8	1.89	T.							Lytton Springs.	64	35	49.1	7.30	
Union Springs t.	72	20	47.2	2.65	T.							McMullin *1.	74	32	52.5	1.00	
Uniontown t.	74	24	49.6	1.32								Makaloff Mine *1.	72	28	45.7	13.03	8.0
Valleyhead.	68	11	40.0	1.32	T.							Mammoth Tank *8.	87	47	56.1	0.00	
Warrior.	... .	... .	... .	0.94								Manzana.	75	27	45.0	0.02	
Wetumpka.	72	20	46.4	2.15								Mare Island L. H.	... .	... .	... .	2.58	
Wilsonville t.	... .	... .	... .	0.81								Merced *8.	72	33	53.4	1.18	
<i>Arizona.</i>												Mills College.	... .	... .	... .	3.10	
Arizona Canal Co. Dam.	82	39	59.4	0.00								Milton (near) *1.	73	33	53.5	4.03	
Benson *8.	73	36	56.3	0.00								Modesto *8.	84	36	55.4	0.71	
Bisbee t.	71	34	51.0	0.26								Mohave *8.	76	30	51.4	T.	
Buckeye t.	90	30	59.8	0.00								Mokelumne Hill *3.	83	47	47.4	4.45	
Calabasas.	75	30	51.9	0.00								Mount Tamalpais.	67	31	46.4	6.69	
Casa Grande *8.	70	45	57.5	0.00								Mutab Flat.	... .	... .	... .	1.00	
Cedar Springs.	76	29	50.6	0.06								Needles.	81	41	61.4	0.00	
Congress.	76	41	58.6	T.								Nevada City.	68	27	45.4	9.91	
Dragoon.	... .	... .	... .	0.00								Newhall *2.	85	29	51.8	... .	
Dragoon Summit *5.	70	30	51.0	0.00								North Ontario.	78	34	53.6	1.11	
Dudleyville.	80	30	53.6	0.10								North San Juan *1.	72	32	48.2	8.72	
Empire Ranch.	70d	30	48.2	0.00								Oakland a.	70	38	51.4	2.85	
Flagstaff t.	65	4	36.2	0.45	4.5							Ogilby *8.	80	50	61.4	0.00	
Fort Apache.	65	18	42.0	1.50								Oleta *1.	68	32	47.4	5.80	
Fort Defiance.	56	4	33.2	0.25	2.5							Orangevale t.	69	30	51.4	3.98	
Fort Grant t.	74	32	52.4	T.								Orland *2.	75	37	50.2	3.64	
Fort Huachua t.	74	31	51.2	0.39								Oroville b.	78	32	52.2	6.03	
Fort Mohave.	87	37	59.4	0.00								Paso Robles b.	73	30	51.0	1.55	
Gilbend a *8.	84	38	59.7	0.00								Peachland *8.	74	32	51.7	8.28	
Gisela.	75	24	50.6	0.94								Piedras Blancas L. H.	... .	... .	... .	2.06	
Holbrook t.	71	11	37.4	0.11								Pigeon Point.	... .	... .	... .	0.97	
Jerome.	82	32	52.4	0.15								Pilot Creek.	... .	... .	... .	9.44	16.5
Lochiel *1.	71	31	49.0	0.14								Pine Crest.	80	43	57.9	... .	
Maricopa *8.	92	40	64.9	0.00								Placerville.	66	27	46.4	6.18	
Mesa t.	80	38	57.2	T.								Point And Nuevo L. H.	... .	... .	... .	0.96	
Mount Huachua.	74	27	49.2	0.17								Point Arena L. H.	... .	... .	... .	7.14	
Music Mountain.	76	25	49.4	0.63								Point Bonita L. H.	... .	... .	... .	3.44	
Natural Bridge.	... .	... .	... .	0.60								Point Conception L. H.	... .	... .	... .	1.06	
Oracle.	73	30	52.0	0.00								Point Fermin L. H.	... .	... .	... .	0.25	
Oro.	... .	... .	... .	0.00								Point George L. H.	... .	... .	... .	5.48	
Oro Blanco.	75	30	52.7	0.00								Point Hueneme L. H.	... .	... .	... .	0.54	
Pantano *8.	82	38	58.0	0.13								Point Lobos.	64	43	50.4	2.64</td	

TABLE II.—*Meteorological record of voluntary and other cooperating observers—Continued.*

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.	
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.
<i>California—Cont'd.</i>																	
Roe Island L. H.	°	°	°	In. s.	In. s.	Colorado—Cont'd.	°	°	°	In. s.	In. s.	Florida—Cont'd.	°	°	°	In. s.	In. s.
Rosewood	75	23	46.2	1.53	3.80	Manitou Park	55	3	30.5	0.27	3.0	Sebastian	82	42	64.0	1.09	
Sacramento a	70	36	52.4	3.46		Millbrook	56	—9	26.3	0.90	10.0	Switzerland* <sup>1</sup>	77	29	52.5 <sup>c</sup>	2.01	
Salinas* <sup>a</sup>	77	31	55.2	1.58		Minneapolis†	77	4	40.2	0.05	0.5	Tallahasse†	78	26	53.9	3.06	
Salton* <sup>a</sup>	95	22	49.6	0.00		Moraine†	48	0	30.4	1.05	10.5	Tarpon Springs†	81	28	58.1	1.50	
San Bernardino†	85	33	56.2	0.60		Pagoda†	51	—10	25.1	0.80	8.0	Wausau	77	21	50.6	5.15	
San Jacinto	83	29	53.6	0.49		Paonia†	56	.....	.....	0.41	4.8						
San Leandro* <sup>1</sup>	79	40	55.9	2.66		Parachute†	56	.....	.....	0.00	0.0						
San Luis L. H.				2.15		Rangely†	48	—23	14.1	0.43	6.0						
San Mateo* <sup>a</sup>	69	37	52.6	3.04		Redcliff	.....	.....	.....	0.63	6.5						
San Miguel* <sup>a</sup>	76	31	49.9	1.17		Rico	46	—2	25.4	1.35	13.5						
Santa Barbara a	82	40	55.9	0.97		Rockyford	74	12	38.4	0.00	0.0						
Santa Barbara L. H.				0.78		Ruby	.....	.....	.....	2.54	25.5						
Santa Clara a				2.12		Saguache†	54	2	28.5	0.10	1.0						
Santa Cruz†	81	30	52.5	2.67		Salida	64	8	33.8	1.00	10.0						
Santa Cruz L. H.				2.79		Santa Clara* <sup>1</sup>	57	8	30.6	1.80	19.0						
Santa Maria	78	33	56.5	1.06		Seibert	.....	.....	.....	T.	T.						
Santa Monica* <sup>a</sup>	76	34	57.6	0.31		Smoky Hill Mine	59	3	33.8	0.90	9.0						
Santa Paula	84	36	54.4	0.70		Springfield	.....	.....	.....	0.09	1.1						
Santa Rosa* <sup>a</sup>	68	35	52.5	5.32		Stamford* <sup>1</sup>	53	0	30.1	1.83	18.5						
Saticoy				0.92		Steamboat Springs	49	—18	20.0	0.47	5.0						
Shasta				8.39		Strickler Tunnel	.....	.....	.....	0.59	8.5						
Sierra Madre	79	40	56.6	0.41		T. S. Ranch†	57	10	31.3	0.07	0.9						
Sneddens Ranch* <sup>1</sup>	66	10	33.1	0.41		Vilas	43	—16	13.5	0.65	8.0						
S. E. Farallone L. H.				3.07		Wagon Wheel	50	—8	20.6	0.17	2.5						
Stanford University <sup>1</sup>	70*	34	50.0	1.84		Wallet	.....	.....	.....	T.	T.						
Stockton a	73	34	51.8	1.32		Wray†	68	4	33.9	0.07	0.8						
Summerdale†	62	23	39.3	7.25	9.0	Yuma	.....	.....	.....	0.20	2.0						
Susanville†	57	16	36.4	2.38	12.5												
Sutter Creek* <sup>a</sup>	66	26	44.3	5.28													
Tehama* <sup>a</sup>	69	37	51.1	3.20													
Templeton* <sup>a</sup>	78	30	44.5	1.83													
Trinidad L. H.				7.34													
Truckee* <sup>a</sup>	50	16	32.6	3.65	34.0	Hartford a	49	—4	29.4	5.19	.....						
Tulare b				0.82		Hartford b	.....	.....	.....	5.89	7.0						
Tulare c	84	32	56.1	0.97		Lake Konomoc	.....	.....	.....	6.07	.....						
Turlock	75	40	54.7	0.68		Middleton	53	—12	30.2	5.98	13.0						
Ukiah†	71	26	48.6	7.08		New London†	49	3	29.0	4.01	12.0						
Upperlake	74	25	47.2	4.57		North Grosvenor Dale	51	—16	27.7	3.17	2.0						
Upper Mattole* <sup>1</sup>	78	32	52.1	22.25		Norwalk	54	—13	29.0	3.39	.....						
Vacaville a* <sup>1</sup>	74	37	51.0	3.01		Pomfret	51	—5	28.4	3.67	T.						
Ventura†	88	32	51.8	0.74		Southington	53	—12	28.5	4.90	9.5						
Vitalia	76	27	51.1	0.96		South Manchester	.....	.....	.....	4.91	12.0						
Volcano Springs* <sup>a</sup>	92	46	66.2	0.00		Storrs	51	—4	27.6	4.03	5.1						
Walnut Creek	73	33	52.4	3.16		Voluntown†	57	—14	30.3	5.12	10.5						
West Palmdale* <sup>1</sup>	74	25	47.4	0.07		Waterbury	55	—6	29.8	3.49	4.0						
Westpoint				4.71		West Cornwall†	50	—6	26.6	3.69	15.8						
Wheatland†	68	31	50.1	4.25		West Simsbury	.....	.....	.....	6.00	21.0						
Williams* <sup>a</sup>	70	37	52.2	2.32		Windsor	50	—10	27.0	6.05	13.0						
Wilmington* <sup>5</sup>	79	47	63.8	T.		Winsted* <sup>1</sup>	50	—8	25.8	.....	.....						
Wire Bridge* <sup>6</sup>	72	32	50.4	6.58													
Yerba Buena L. H.				1.94													
Yreka†	59	22	41.0	1.44		Dover	63	6	34.8	2.35	.....						
Yuba City* <sup>a</sup>	66	45	53.2	4.36		Millford	65	10	38.9	1.68	T.						
<i>Colorado.</i>						Millsboro	64	10	36.5	1.24	T.						
Altman	45	3	23.8	0.31	3.6	Newark	61	0	33.2	2.94	T.						
Antlers†	58	8	31.1	0.10	2.0	Seaford	65	11	36.6	1.81	T.						
Arkins				0.25	3.0												
Boulder	68	17	38.8	0.55	4.2	<i>District of Columbia.</i>	68	6	34.2	1.37	.....						
Boxelder				0.22	2.0	Receiving Reservoir* <sup>5</sup>	68	4	33.7	1.45	.....						
Breckenridge†	52	—23	16.8	0.59	7.2	West Washington	70	3	34.4	1.80	T.						
Canyon†	66	6	40.4	0.39	5.5												
Cedaredge	60	3	32.0	0.50	5.0	<i>Florida.</i>	80	28	55.9	3.31	.....						
Cheyenne Wells	70	4	34.8	0.00	0.0	Archer†	84	30	59.4	0.87							
Collbran				0.27	4.5	Bartow	84	41	65.9	1.82							
Colorado Springs†	65	12	34.7	0.21	3.2	Boca Raton†	84	41	59.4	1.82							
Cope	68	7	35.9	0.01	T.	Brooksville†	79	23	57.4	1.97							
Crook	63	3	32.0	0.07	0.8	Carrabelle†	72	23	53.4	4.30							
Delta	63	—1	31.2	0.10	1.5	Clermont†	83	34	61.4	0.81							
Dumont†				0.90	9.0	De Funiak Springs	77	20	51.4	5.47							
Durango	59	15	35.0	0.45	5.5	Earnestville	83	28	59.0	1.43							
Fleming				0.20	2.0	Eustis†	83	28	59.0	1.43							
Fort Collins†	64	7	34.1	0.08	0.8	Federal Point†	79	31	55.8	1.09							
Fort Morgan	60	5	33.8	0.01	T.	Fort Meade	86	27	59.0	0.57							
Fox				0.25	T.	Frostproof	89	32	63.0	0.14							
Garnett	58	—4	24.4	0.05	0.5	Gainesville	77	26	55.4	3.49							
Georgetown	56	10	31.1	0.10		Grasmere†	80	29	57.0	1.13							
Gleneyrl†	63	11	35.4	0.18		Haywood	74	25	52.5	3.50							
Grand Junction†	57	—1	28.7	T.	Huntington	78	34	58.6	1.34								
Greeley†	63	10	34.6	0.38	1.5	Jasper†	80	21	52.7	1.35							
Gulch†	52	11	28.8	0.53	7.5	Kissimmee	81	32	60.5	1.13							
Gunnison	55	—19	23.3	0.31	3.2	Lake Butler	80	24	56.4	4.78							
Hamps	67	4	32.8	0.02	0.2	Lake City†	79	24	55.2	4.04							
Hoechne	64	3	35.2	1.01	.....	Lemon City	85	40	66.2	2.45							
Holly				T.	Maccleeny†	80	23	54.6	3.13								
Holyoke				0.05	0.5	Manatee	83	31	59.5	0.81							
Holyoke (near)	64	1	36.0	0.12	1.5	Merritts Island	79	36	61.4	1.22		</td					

TABLE II.—*Meteorological record of voluntary and other cooperating observers—Continued.*

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.			
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		
<i>Illinois.</i>																			
Albion†	0	1	35.4	1.91	1.5	Ins.	0	6	20.5	1.39	4.5	Greenfield	0	8	26.3	1.72	2.3		
Alexander†	65	—	33.6	2.81	7.0	Delphit	67	—	37.7	2.10	3.4	Grinnell	48	—	9	24.3	0.75	4.3	
Ashton† <sup>1</sup>	48	—	24.5	2.14	11.4	Edwardsville*† <sup>1</sup>	66	—	32.2	3.24	4.5	Grundy Center	44	—	14	21.2	0.77	7.0	
Aurora a	53	—	10	26.0	3.21	12.4	Farmland†	64	—	32.2	2.22	9.0	Guthrie Center	45	—	7	25.3	0.97	1.4
Aurora b	52	—	10	25.0	3.19	13.8	Fort Wayne	65	—	29.4	1.65	1.5	Hampton	41	—	12	20.3	1.56	12.1
Bloomington†	67	—	8	30.2	1.77	2.0	Franklin*†	67	—	33.6	1.59	3.2	Hawkeye	—	—	—	—	1.70	17.0
Bushnell†	68	—	5	31.1	1.64	1.0	Hammond†	66	—	31.7	2.70	4.5	Hedrick*†	59	—	12	27.9	0.60	—
Cambridge	55	—	6	26.4	1.77	12.2	Hector	64	—	29.1	0.91	7.0	Hopeville†	48	—	6	26.1	1.16	—
Carlinsville†	69	—	2	35.5	1.96	3.5	Huntington	64	—	29.1	2.13	7.7	Humboldt†	40 <sup>c</sup>	—	13	21.4	1.29	—
Carlyle	—	—	—	—	1.76	—	Jasper†	68	—	36.6	2.15	5.5	Independence†	42	—	11	20.8	1.34	13.5
Carrolton	69	—	2	32.8	2.00	1.5	Jeffersonville	66	—	37.5	1.65	1.5	Indianola†	46	—	7	25.6	0.54	4.2
Charleston	66	—	2	32.7	1.38	3.1	Kokomo†	65	—	31.8	2.29	4.5	Iowa City a	51	—	12	25.0	1.15	7.0
Chester	—	—	—	—	1.98	—	Lafayette†	61	—	31.2	1.60	4.0	Iowa Falls†	43	—	18	20.5	2.17	17.8
Cisne†	71	—	3	36.5	1.20	0.5	Hammond†	58	—	29.1	1.27	2.9	Kosauqua	62 <sup>c</sup>	—	5	27.8	1.46	9.7
Coatsburg	61	—	4	30.6	2.26	5.0	Hector	—	—	—	—	—	Knoxville	49	—	6	26.5	1.04	6.0
Cobden†	70	—	5	38.1	1.37	0.8	Huntington	64	—	29.1	2.88	7.0	Lamoni	50	—	7	27.3	0.92	2.0
Danville	65	—	6	31.4	1.79	3.7	Jasper†	68	—	36.6	2.15	5.5	Larchwood	45	—	9	23.3	1.70	16.5
Decatur†	68	—	4	32.4	2.71	3.5	Kokomo†	65	—	31.8	2.29	4.5	Larambee†	47	—	12	21.6	0.94	4.8
Dixon†	53	—	9	24.4	2.26	16.5	Lafayette†	66	—	30.8	1.75	4.5	Lemars	43	—	8	22.8	0.45	5.0
Dwight†	60	—	8	27.9	2.07	3.8	Marion†	66	—	31.8	1.51	11.0	Lenox*†	51	—	2	27.9	1.54	3.1
East Peoria†	66	—	7	32.8	2.18	—	Markle	62	—	31.3	1.80	6.2	Logan†	50	—	6	26.4	0.80	4.0
Effingham†	67	—	1	34.8	1.65	4.3	Maunzy†	66	—	31.3	2.5	—	Malvern	49	—	10	23.6	1.52	11.3
Elgin	51	—	10	24.9	2.44	13.6	Michigan City* <sup>10</sup>	58	—	27.6	—	—	Marquoketa	49	—	10	23.6	1.31	3.8
Fort Sheridan†	56	—	8	25.0	2.91	19.0	Mount Vernon†	72	—	37.2	1.76	2.5	Marshall†	46	—	10	24.8	0.62	3.5
Friendsgrove†	—	—	—	—	1.86	1.2	Northfield†	65	—	30.4	2.10	4.0	Mason City	41	—	15	20.4	0.95	—
Galva†	58	—	11	26.4	1.43	7.0	Rockport	70	—	31.8	1.36	—	Millman	46	—	13	23.4	0.97	9.7
Glenwood*† <sup>1</sup>	60	—	4	28.0	2.11	—	Rockville†	66	—	32.9	1.74	1.0	Monticello	60	—	6	28.7	1.12	—
Golconda†	71	—	4	39.0	1.25	—	Salem	68	—	33.8	2.20	6.5	Moor	60	—	7	25.7	0.95	—
Grafton†	—	—	—	—	1.30	1.2	Scottsburg	67	—	37.0	1.59	2.5	Mountayrt†	50	—	7	27.3	1.41	2.0
Grayville	69	—	7	39.7	1.79	3.0	Seymour	68	—	33.5	1.60	2.5	Mount Pleasant* <sup>1</sup>	54	—	5	28.4	0.77	—
Greenville†	64	—	0	33.0	4.23	1.7	Shelbyville	70	—	36.1	2.08	7.2	Mount Vernon a*†	48	—	12	24.1	—	—
Griggsville†	68	—	2	33.7	2.19	6.0	South Bend†	60	—	28.6	2.66	12.0	Mount Vernon b	47	—	13	23.2	1.46	15.1
Halliday* <sup>5</sup>	69 <sup>a</sup>	—	10 <sup>b</sup>	39.0 <sup>c</sup>	1.41	T.	Syracuse†	—	—	—	—	—	New Hampton	54	—	9	24.4	1.60	16.0
Havanat†	67	—	1	33.9	2.08	4.0	Terre Haute†	60	—	33.9	1.53	2.2	Newton†	46	—	10	24.5	0.85	5.0
Hillsboro†	69	—	3	34.8	3.07	2.5	Topeka†	67	—	27.7	—	—	Northwood	42	—	13	19.8	1.95	12.0
Joliet†	62	—	8	28.9	2.28	5.4	Valparaiso†	60	—	26.6	0.26	2.6	Odebold	43	—	9	23.1	0.95	4.2
Jordans Grove†	67	—	7	37.2	1.94	0.4	Vevay	65	—	36.4	2.15	5.0	Ogden	44	—	13	22.8	1.01	5.2
Kankakee a	62	—	6	31.4	—	Vincennes	58	—	32.9	3.03	5.0	Osage* <sup>8</sup>	47	—	7	25.8	1.18	4.5	
Kishwaukee	50	—	12	23.4	2.12	16.2	Warsaw†	63	—	27.6	1.73	—	Oscaloosa†	51	—	14	25.4	0.87	4.7
Knoxville a	61	—	10	28.2	1.86	7.4	Washington†	72	—	38.3	—	—	Ottumwa†	55	—	7	25.2	0.65	6.5
Lagrange†	55	—	10	26.5	2.60	7.5	Winnipeg	65	—	32.3	1.79	—	Ovid†	51	—	9	20	1.25	6.0
Lanahrpe†	54	—	10	28.3	1.40	8.2	Worthington†	70	—	35.3	1.64	2.2	Plover	44	—	13	20.8	0.60	6.0
Lamar‡	49	—	10	22.7	1.52	13.3	Wyo.	—	—	—	—	—	Portsmouth	41	—	11	21.8	0.82	4.6
Lexington	65	—	6	29.8	2.11	—	Adair	—	—	—	—	—	Primghar	41	—	8	28.4	1.49	—
Loami†	—	—	—	—	2.31	1.0	Alderson	47	—	26.6	1.51	3.0	Red Oak	49	—	7	28	0.54	5.0
McLeansboro†	70	—	4	37.2	1.20	1.5	Albia	—	—	—	—	—	Rockwell City	44	—	11	20.6	0.54	—
Martinsville†	67 <sup>c</sup>	—	0	33.6 <sup>c</sup>	1.26	3.0	Clinton	79	—	48.8	1.58	—	Ruthven	41	—	13	20.8	0.85	8.5
Martinton†	64	—	5	28.6	1.90	—	Algonia*†	40	—	20.4	1.65	1.5	Sac City†	42	—	10	21.9	1.12	6.2
Mascoutah	68	—	5	36.0	2.89	1.3	Carrollton†	77	—	47.6	1.17	—	Sibley	46	—	12	21.2	0.57	1.5
Mattoon†	65	—	0	34.1	1.58	—	Tahlequah	70	—	36.4	0.67	—	Sigourney	52	—	10	25.9	1.06	6.0
Minonk†	63	—	9	28.0	1.78	3.8	Tulsa†	60	—	26.6	0.26	2.6	Spencer	42	—	13	20.2	0.67	2.1
Monmouth†	57	—	10	27.0	1.38	6.8	Wagoner†	70	—	40.7	1.19	—	Spirit Lake†	38	—	14	20.3	0.60	6.0
Morrisonville†	68	—	4	33.2	2.74	1.7	Adair	—	—	—	—	—	Stuart	46	—	11	24.8	0.40	4.0
Mount Carmel†	—	—	—	—	1.73	0.4	Alderson	47	—	26.6	1.51	3.0	Terre Haute†	48	—	10	23.4	1.30	11.0
Mount Pulaski	68	—	4	32.8	2.20	7.5	Albia	—	—	—	—	—	Tara	49	—	10	23.4	1.30	11.0
Mount Vernon†	70	—	4	35.1	1.60	3.0	Clinton	40	—	20.4	1.65	1.0	Thurman	54	—	6	28.0	1.72	9.0
New Burnside†	70	—	5	38.6	1.07	T.	Algonia*†	42	—	21.0	0.93	7.2	Toledo	44	—	12	22.8	0.82	7.5
Oswego*† <sup>1</sup>	55	—	9	24.9	2.59	2.8	Amanat	48	—	23.4	1.11	8.1	Villisca†	50	—	10	27.2	1.92	3.0
Ottawa†	59	—	8	27.7	2.38	6.2	Amesb.	44	—	22.6	—	—	Washington	51	—	12	24.6	1.10	8.2
Palestine†	68	—	4	35.0	1.56	3.0	Ames (near)	—	—	—	—	—	Wilton Junction†	50	—	12	25.6	1.31	8.0
Paris <sup>d</sup>	68	—	9	33.0	1.69	—	Atlantic†	48	—	25.2	1.10	2.0	Wyo.	—	—	—	—	0.85	1.8
Pearlia†	65	—	2	31.3	2.50	5.0	Belknap	50	—	26.2	1.77	17.5	Waterloo	42	—	10	21.7	1.19	10.0
Philol†	66	—	5	31.2	1.28	1.8	Belleplaine	47	—	21.8	1.30	13.0	Waverly	43	—	11	23.3	1.30	10.8
Plumhill†	70	—	7	35.6	2.06	0.6	Bonaparte†	56	—	26.5	1.00	5.0	Webster City	46	—	12	23.3	1.04	8.5
Rantoul†	61	—	8	29.9	1.76	2.7	Britt	41	—	19.8	1.57	5.7	Westbend*† <sup>1</sup>	40	—	12	19.7	1.40	9.0
Reynolds	54																		

TABLE II.—*Meteorological record of voluntary and other cooperating observers—Continued.*

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.	
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.
<i>Kansas—Cont'd.</i>																	
Fanning	60	0	0	In.	In.	Kentucky—Cont'd.	60	0	0	In.	In.	Maryland—Cont'd.	60	0	0	In.	In.
Fort Riley †	61	-7	32.0	1.81	1.0	Sandyhook	65	0	34.8	3.30	3.0	New Market	60	2	1.97	0.9	
Fort Scott †	66	-7	37.0	1.50	T.	Scott	65	-2	36.8	2.00	3.0	Pocono City	70	12	40.4	1.50	
Frankfort	65	3	33.9	1.80	3.0	Shelby City	67	-2	36.8	2.13	4.0	Port Deposit	64	2	33.4	2.10	1.0
Garden City †	73	9	36.3	0.00		Shelbyville	68	-2	36.8	1.37	4.7	Princess Anne	68	11	37.5	1.40	T.
Garfield				0.48	3.1	Southfork						Sharpsburg	60	3	31.2	1.24	T.
Gibson	74	8	36.0	0.05	T.	Vanceburg	66	-2	32.9	2.10	T.	Smithsburg	68	1	31.5	1.49	T.
Gove † <sup>1</sup>	70	9	37.1	T.	Williamsburg †	69	5	37.6	1.71	1.5	Solomonst.	69	11	36.4	1.86	0.4	
Grainfield <sup>*6</sup>	75	11	37.3	0.00		Woodburn <sup>†</sup>	68	6	30.3	1.10	3.0	Sunnyside	64	-9	26.6	2.65	13.0
Grenola	72	9	39.2	2.32	T.	Louisiana.						Taneytown †	63	3	31.6	1.86	1.1
Halstead	66	6	33.8	1.55	T.	Abbeville	80	30	57.6	6.00		Van Bibber	62	4	32.6	2.20	T.
Hays	68			0.25	2.5	Alexandria †	76	26	52.8	4.24		Westernport	66	-1	30.2	0.76	2.5
Horton	60	2	32.8	1.90	2.0	Amitie †	79	26	54.5	8.89		Westminster	62	3	34.2	1.62	
Hoxie	69	2	34.6	0.00		Bastrop †	77	23	52.4	1.74		Woodstock	61	2	32.1	1.31	T.
Hutchinson	73	13	40.8	0.50	T.	Baton Rouge †	78	29	55.1	7.48		Massachusetts.					
Lakin †	72	9	38.8	T.	Calhoun	72*	32	50.6	2.95		Adams	50	-10	27.7			
Lawrence <sup>1</sup>	64	6*	35.4	1.93		Cheneville †	72	30	53.8	4.40		Ainherst	50	-15	27.6	4.83	22.6
Lebo †	66	10	36.6	2.46	T.	Clinton	77	26	54.8	4.66		Attleboro					
Macksville	68	14	36.7	0.00		Donaldsonville	78	30	56.1	6.20		Bedford	57*	10*	33.7	4.25	
McPherson	71	2	35.0	1.06		Elm Hall	76	31	56.2	6.22		Bluchill (summit)	53	-1	29.8	5.28	14.0
Manhattan <sup>b</sup>	66	9	35.8	1.37	0.2	Farmerville	74	21	49.7	3.20		Cambridge a	58	-3	29.3	5.35	
Manhattan c	66	9	35.7	1.35	T.	Franklin †	76	32	55.7	8.13		Chestnut Hill	56	-8	30.2	5.58	9.5
Marion †	66	9	38.2	1.80	T.	Grand Coteau	77	35	57.2	8.07		Clinton	55	-9	27.9		
Meade †				0.60	6.0	Houma	79	29	57.0	7.30		Cohasset					
Medicine Lodge †	75	15	40.0	1.15		Jeanerette	80	28	57.3			Concord	50	-19	27.4	4.57	23.7
Minneapolis <sup>t</sup>	64	6	34.2	1.05	1.0	Jennings	77	29	55.8	7.66		Dudley <sup>1</sup>	52*	-4	29.4	3.55	14.0
Morantown <sup>t</sup>	64	10	37.4	2.04	T.	Lafayette	84	32	60.0	4.84		East Templeton <sup>†</sup>	51	-4	26.6	1.96	19.0
Morland	74	4	35.8	0.01		Lake Charles <sup>t</sup>	79	31	56.4	5.87		Fall River	50	3	32.7	6.12	7.0
Mount hope <sup>1</sup>	67	11	38.0	1.45		Lawrence	74	35	56.6	8.29		Fiskdale					
Ness City	68	10	38.0	0.12	1.5	Liberty Hill	77	21	52.6	2.82		Fitchburg a <sup>*</sup> 1	53	-2	27.5	4.14	15.5
Newton	71	10	37.9	1.87		Mansfield	75	18	50.8	3.95		Fitchburg b	54	-3	28.0	4.01	10.0
Norton	65	5	35.8	0.01	0.1	Melville	74	32	54.9	4.55		Framingham	53	-14	29.3	4.27	
Norwich	69 <sup>d</sup>	14 <sup>d</sup>	39.8 <sup>d</sup>	1.55	T.	Minden	74	22	50.1	3.20		Groton	54	-6	26.6	4.66	17.0
Oberlin				0.00		Monroe †	74	25	51.5	3.29		Hadley	54	-23	24.9		
Olathe <sup>t</sup>	65	0	35.4	1.30		Montgomery						Hyannis <sup>†</sup> 1	54	2	31.8	4.27	5.1
Osage City <sup>t</sup>	66	7	36.4	1.88		New Iberia	75	34	55.6	5.70		Jefferson					
Osborne				0.77		Opelousas	78	29	55.9	6.75		Lawrence	57	-19	28.2	4.92	34.2
Oswego	71	13	41.8	1.11	1.0	Paincourtville †	78	31	56.6	6.51		Leeds	50	-19	25.6	4.45	23.5
Ottawa	65	6	36.4	1.65	T.	Plain Dealing †	74	22	50.4	2.73		Leicester Hill	51	-4	27.4		
Paola				1.75		Plaquemine	80	31	56.0	4.98		Leominster					
Phillipsburg	66	4	33.2	0.15	1.5	Rayne	79	31	56.4	7.78		Long Plain					
Pleasant Dale				1.15	5.0	Robeline	77	20	51.2	3.27		Lowell a	56	-16	28.0	7.05	
Pratt	67	19	40.6	T.	Ruston	75	21	52.0	3.17		Lowell c	62	-5	29.0			
Rome <sup>*1</sup>	63	14	39.3	2.58		Schriever	82	28	56.0	6.82		Ludlow	49	-15	22.8		
Russell	77	7	36.6	0.59	3.5	Shellbeach	73	36	57.0	8.78		Lynn a	60	3	30.7		
Salina <sup>t</sup>	67	8	34.8	0.33	0.5	Southern University <sup>t</sup>	79	28	55.2	12.50		Mansfield <sup>†</sup>	51	-20	28.2	5.73	14.0
Sedan <sup>t</sup>	70	12	40.1	2.06		Sugar Ex. Station <sup>t</sup>	74	29	54.4	8.96		Middleboro	54	-9	30.0	4.96	4.0
Seneca	64	2	34.0	1.26	1.5	Sugartown <sup>t</sup>	77	31	55.4	5.11		Monson	54	-11	29.5	3.93	14.0
Sharon Springs <sup>*1</sup>	82	12	43.0	T.	Venice <sup>t</sup>	78	34	56.4	7.02		Mount Nonotuck						
Toronto	71	10	38.5	2.30	T.	Wallace	75	32	55.4	6.66		New Bedford a	54	5	33.0	5.28	3.0
Ulysses <sup>t</sup>				0.12	1.2	Whitehall <sup>t</sup>	80	31	59.4	4.50		New Salem	53	-7	26.6	4.23	17.7
Viroqua <sup>t</sup>	75	7	40.4	0.10		White Sulphur Springs	92	24	56.2	5.12		Pittsfield	45	-10	25.0	3.74	26.5
Wallace <sup>a</sup>	70	10	33.4	0.00		Maine.						Plymouth					
Wamego <sup>*1</sup>	62	6	34.6	1.58	T.	Bar Harbor	50	-1	28.0	9.15	32.5	Princeton					
Wellington <sup>t</sup>	66	20	43.0	2.21	T.	Belfast <sup>*</sup>	40	-8	26.6	11.35	29.0	Salem					
Winona <sup>*1</sup>	70	14	36.1	0.00		Flagstaff						Somerset <sup>1</sup>	62	-6	32.2	6.11	14.0
Yates Center	67	7	37.2	2.42		Gardiner	51	-23	25.6	5.45		South Clinton					
<i>Kentucky.</i>						Indian Stream	41	-31	18.0	7.99		Springfield Armory	55	-10	28.4	4.45	15.8
Alpha						Kineo <sup>t</sup>	39	-30	18.2	6.90		Sterling					
Ashland	70	-1	36.0	1.52	1.5	Lewiston	50	-18	25.8	7.07		Taunton b	51	-10	29.2	6.43	14.5
Bardstown <sup>t</sup>	71	3	36.5	0.62		North Bridgton	45	-21	22.8	7.26		Taunton c	55	-15	29.8	6.07	
Blandville <sup>t</sup>	68	6	38.2	1.27	0.2	Orono	47	-25	24.6	8.05	39.0	Turners Falls	53	-21	25.5	1.86	
Bowling Green <sup>b</sup>	70	7	38.6	0.82	2.0	Pettit Menan <sup>*1</sup>	37	12	24.6	1.25		Michigan.					
Burnside <sup>t</sup>				1.58	2.9	Winslow	46	-28	21.2	4.91	26.0	Adrian	57	-7	25.3	1.38	6.8
Caddo	68	-3	34.8	3.49	3.8	Maryland.	63	7	36.4	1.40		Agricultural College	50	-10	23.8	1.82	15.7
Canton <sup>*1</sup>	73	10	42.0	0.71	T.	Bachmans Valley	58	2	31.3	1.91		Allegan	53	1	26.2	2.55	28.0
Carlisle	65	0	35.9	1.53	4.0	Boettcherville	65	2	31.2	0.70		Alma	46	-10	23.1	1.93	18.5
Carrollton <sup>t</sup>	70	0	36.7	1.25	1.0	Charlotte Hall <sup>t</sup>	70	2	35.6	1.10		Ann Arbor	55	-6	24.5	2.16	10.9
Catlettsburg				1.25	8.0	Cherryfields <sup>t</sup>	64	-5	34.4	1.45		Arabela	52	-8	24.6	2.94	18.0
Earlington	70	11	38.4	1.35	0.6	Chestertown	61	9	38.8	1.97		Baldwin	47	-23	21.8	3.06	28.0
Edmonton <sup>t</sup>	67	5	38.1	1.49	7.1	Collegepark	68*	11	36.2	1.36		Ball Mountain	50	-9	22.5	1.80	15.0
Ensor	70	4	38.2	1.60	1.5	Cumberland b	66	9	37.0	1.15		Battle Creek	56	-6	25.3	3.25	24.7
Eubank	74	1	37.6	2.41	6.8	Darlington <sup>t</sup>	62	1	33.0	1.73		Bay City b	47	-12	25.8		
Falmouth <sup>t</sup>	71			2.03		Deerpark	61	-6	26.8	3.21	22.0	Benton Harbor	57	-2	28.0	2.76	14.0
Fords Ferry	71	8	38.9	1.07	1.0	Denton	67	7	35.4	2.03		Berlin	51	-13	22.1	3.35	14.9
Frankfort	64	2	37.5	0.62		Easton <sup>t</sup>	63	10	34.3	1.60		Big Rapids	49	-8	21.4	2.95	16.5
Georgetown	65	1	35.8	T.	Ellis												

TABLE II.—*Meteorological record of voluntary and other cooperating observers—Continued.*

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.			Stations.	Temperature. (Fahrenheit.)			Precipita- tion.			Stations.	Temperature. (Fahrenheit.)			Precipita- tion.				
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		
<i>Michigan—Cont'd.</i>																						
Fairview	0	0	0	Ins.	Ins.	Lambert†	0	0	Ins.	Ins.	Eightmile*	0	0	0	Ins.	Ins.	0	0	0	0		
Fitchburg	53	-10	23.7	3.48	21.5	Leech Lake	48	-31	11.8	1.00	10.0	Eldon	63	8	36.2	2.04	T.	63	3	37.0	2.04	
Flint	53	-12	22.8	1.96	16.5	Long Prairie	50	-33	10.8	0.67	6.4	Elmira	67	-	32.0	1.14	T.	60	6	32.0	1.14	
Gladwin	45	-14	21.4	1.85	17.0	Lutsen	44	-24	14.0	1.05	11.5	Fairport	—	—	—	—	—	—	—	—	—	—
Grand Rapids b	52	-1	24.8	5.77	29.5	Luverne†	37	-20	16.2	0.64	—	Farmersville	—	—	—	—	—	—	—	—	—	
Grape	59	-5	27.2	1.74	7.5	Lynd	45	-9	19.8	0.40	4.0	Fayette	—	—	—	—	—	—	—	—	—	—
Grayling	43	-21	19.0	1.60	14.0	Mapleplain	48	-15	16.4	0.48	4.8	Fulton	68	3	36.6	1.95	T.	—	—	—	—	—
Hanover	54	-8	25.5	2.84	15.5	Maplewood *†	43	-14	20.8	—	—	Gallatin *†	54	-2	31.9	1.39	4.0	—	—	—	—	—
Harrisville	42	-15	21.5	2.17	20.3	Milaca	47	-20	13.8	0.40	4.0	Glasgow	66	1	34.2	1.94	T.	—	—	—	—	—
Hart	47	-1	25.0	2.09	16.5	Milant	49	-22	15.2	1.45	10.2	Gordonville * <sup>3</sup>	—	9	35.8	1.78	T.	—	—	—	—	—
Hastings	51	-5	23.6	8.57	30.5	Minneapolis a	44	-15	19.2	1.79	9.9	Gorin	—	—	—	—	—	—	—	—	—	—
Hayes	47	-12	21.6	1.82	—	Minneapolis b	43*	-17	19.2	1.43	7.0	Halfway	9	—	—	—	—	—	—	—	—	—
Hillsdale	53	-7	25.2	2.41	10.5	Minnesota City *†	42	-12	21.9	0.91	7.5	Harrisonville†	65	5	34.2	2.42	T.	—	—	—	—	—
Howell	54	-10	25.8	2.61	9.5	Montevideo†	55	-16	18.2	1.00	10.0	Hermann†	—	—	—	—	—	—	—	—	—	—
Humboldt	43	-20	13.8	2.15	20.5	Morris	49	-18	16.4	0.70	7.0	Houston	67	7	40.2	1.86	T.	—	—	—	—	—
Iron River	47	-19	15.4 <sup>a</sup>	1.66	—	Mount Iron	60	-25	14.7	0.60	6.0	Houstonia	—	—	—	—	—	—	—	—	—	—
Ivan	45	-12	22.0	2.61	22.0	Newfolden	45	-32	7.8	—	—	Humansville	68	8	38.6	1.71	0.5	—	—	—	—	—
Jackson	56	-6	26.0	1.90	—	New London	46	-18	15.0	0.70	7.0	Irena	—	—	—	—	—	—	—	—	—	—
Jeddo	52	-9	23.0	2.84	24.8	New Richland†	43	-19	19.4	—	—	Ironton†	69	2	36.6	2.20	0.2	—	—	—	—	—
Kalamazoo	58	-8	25.1	2.60	18.2	New Ulm†	48	-13	19.6	1.58	9.5	Jefferson City†	67	6	37.4	1.70	T.	—	—	—	—	—
Lake City	43	-13	20.2	0.70	7.0	Park Rapids†	43	-31	11.6	0.70	7.0	Kidder	58	-6	30.8	1.50	2.7	—	—	—	—	—
Lansing	52	-6	23.9	1.93	18.2	Pine River	44	-27	13.8	0.99	7.9	Lamar†	69	9	39.4	1.06	T.	—	—	—	—	—
Lapeer	52	-15	22.4	2.31	23.5	Pleasant Mounds	50	-14	19.8	1.46	7.0	Lamonte	65	5	38.2	—	—	—	—	—	—	—
Lathrop	44	-17	18.3	2.90	26.5	Pokegama Falls	44	-37	8.9	0.57	5.3	Lebanon	65	5	38.2	1.03	0.5	—	—	—	—	—
Ludington	47	2	24.6	0.98	6.8	Rolling Green	45	-12	18.8	0.40	4.0	Lexington	63	1	35.1	1.80	T.	—	—	—	—	—
Luzerne	44	-15	18.2	2.29	20.0	Roseau	45	-29	8.0	0.72	7.7	Liberty	65	2	34.8	0.80	T.	—	—	—	—	—
Mackinaw City	44	-14	18.8	2.90	15.0	St. Charles†	41	-22	19.6	1.20	8.5	Louisiana	70	1	35.8	1.82	0.5	—	—	—	—	—
Madison	56	-7	26.0	1.90	9.6	St. Cloud	44	-17	15.8	1.78	16.0	McCune *†	65	1	34.4	1.98	1.5	—	—	—	—	—
Mancelona	43	-6	20.4	1.87	18.0	St. Olaf	45	-15	15.6	0.66	12.8	Malden	70	10	43.6	2.23	T.	—	—	—	—	—
Manistee	44	1	24.2	2.05	17.5	St. Peter	44	-12	16.8	0.30	3.0	Mansfield	—	—	—	—	—	—	—	—	—	—
Manistique <sup>c</sup>	39	-10	20.1	1.78	15.0	Sandy Lake Dam	40	-25	18.0	0.64	4.8	Marblehill	69	4	37.9	2.01	0.2	—	—	—	—	—
Middle Island <sup>*10</sup>	44	-1	25.0	—	—	Sauk Center	43	-22	13.7	—	—	Marshall†	65	2	33.6	1.85	T.	—	—	—	—	—
Midland	45	-12	20.8	—	—	Spring Park	—	—	—	—	—	Maryville	64	-4	27.6	2.15	2.0	—	—	—	—	—
Mottville	53	-11	26.4	2.34	8.7	Tower†	40	-42	5.6	0.00	11.0	Mineralspring	68	6	39.0	0.71	T.	—	—	—	—	—
Mount Clemens	58	-8	24.6	1.72	19.0	Two Harbors	59	-14	20.0	0.79	7.0	Montreal	64	1	37.2	0.81	0.2	—	—	—	—	—
Mount Pleasant b	43	-11	19.6	2.33	22.0	Wabasha *†	43	-14	21.3	1.36	10.0	Mount Vernon	70	11	41.0	0.38	0.5	—	—	—	—	—
Muskegon	45	-4	23.9	1.66	11.0	Willmar†	47	-19	16.0	0.75	6.5	Neosho	68	6	41.2	0.47	T.	—	—	—	—	—
Newberry	43	-11	15.8	1.25	9.5	Worthington	45	-24	19.1	0.30	2.5	Nevada	66	10	37.6	0.21	T.	—	—	—	—	—
North Marshall	52	-16	22.5	—	—	Zumbrota <sup>1</sup>	42*	-17	20.9	—	—	New Haven *†	68	10	38.9	1.25	0.1	—	—	—	—	—
<i>Mississippi.</i>						Agricultural College	71	18	45.4	1.73	T.	New Madrid	67	13	43.4	1.35	T.	—	—	—	—	—
Austin†	75	18	46.4	2.00	T.	Batesville†	68	20	46.2	1.77	T.	New Palestine	71	5	40.8	3.53	T.	—	—	—	—	—
Bay St. Louis	75	31	53.0	8.00	T.	Biloxi†	76	29	53.0	5.03	T.	Oakfield	70	4	37.4	1.44	0.8	—	—	—	—	—
Booneville	71	14	43.8	1.97	T.	Booneville	71	29	51.8	3.47	T.	Oakmound	—	—	—	—	—	—	—	—	—	—
Briers	72	29	51.8	3.47	T.	Brookhaven†	77	23	51.9	5.62	T.	Olden†	68	4	38.5	3.21	T.	—	—	—	—	—
Canton†	74	24	51.4	2.03	T.	Canton†	74	24	51.4	1.91	T.	Oregon a	61	1	32.6	2.34	3.2	—	—	—	—	—
Canton†	74	24	51.4	2.03	T.	Crystal Springs†	77	24	51.5	4.53	T.	Oregon b	64	1	33.8	2.09	2.1	—	—	—	—	—
French Camps	75	16	46.3	1.46	T.	Edwards	73	23	52.5	3.20	T.	Osceola†	—	—	—	—	—	—	—	—	—	—
Greenville a	67	23	47.6	3.05	T.	Fayette	—	—	—	—	—	Oto	—	—	—	—	—	—	—	—	—	
Greenville b†	73	21	48.7	2.89	T.	French Camps	75	16	46.3	1.46	T.	Palmyra * <sup>b</sup>	62	0	32.2	2.07	2.5	—	—	—	—	—
Greenwood	72	25	47.8	1.64	T.	Greeenville a	67	23	47.6	3.05	T.	Phillipsburg *†	64	5	36.3	1.16	0.2	—	—	—	—	—
Hattiesburg†	77	26	52.2	2.65	T.	Greeenville b†	73	21	48.7	2.89	T.	Pickering * <sup>b</sup>	—	—	30.5	1.82	2.0	—	—	—	—	—
Holly Springs†	69	18	42.1	2.13	T.	Hattiesburg†	77	26	52.2	2.65	T.	Platte River * <sup>b</sup>	—	6	29.2	1.24	1.5	—	—	—	—	—
Jackson†	75	23	48.7	2.73	T.	Holy Springs†	69	18	42.1	2.13	T.	Poplar Bluff	70 <sup>1</sup>	7 <sup>2</sup>	39.8 <sup>3</sup>	8.13	T.	—	—	—	—	—
Kosciusko	70	20	48.0	1.63	T.	Jackson†	75	23	48.7	2.73	T.	Potosi	67	0	32.7	1.25	0.2	—	—	—	—	—
Lake†	70	22	44.8	4.00	T.	Kosciusko	75	31	55.4	7.06	T.	Princeton	56	-6	28.4	1.24	8.0	—	—	—	—	—
Logtown†	75	17	47.5	1.08	T.	Lake†	72	29	52.1	—	T.	Rhinelander	68	6	37.2	1.91	0.2	—	—	—	—	—
Louisville†	72	17	47.5	1.08	T.	Lake†	73	19	46.8	2.59	T.	Richmond	60	0	33.0	1.45	T.	—	—	—	—	—
Macomb†	74	23	47.8	1.63	T.	Lake†	70	20	48.0	1.63	T.	Rolla	—	—	—	—	—	—	—	—	—	
Magnolia†	75	24	53.0	7.21	T.	Lake†	70	20	48.0	1.63	T.	St. Charles	70	4	35.6	1.66	1.0	—	—	—	—	—
Natchez†	78	28	54.0	4.50	T.	Lake†	70	20	48.0	1.63												

TABLE II.—*Meteorological record of voluntary and other cooperating observers—Continued.*

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.	
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.
<b>Montana—Cont'd.</b>						<b>Nebraska—Cont'd.</b>						<b>Nevada—Cont'd.</b>					
Greatfalls $\dagger$	63	-8	35.8	0.20	2.0	Loup $b^{\ast}$	62	0	31.4	0.08	1.0	Palisade $\ast$	56	0	34.6	0.30	In. T.
Hogan	52	-15	32.4	0.35	2.0	Lynch $\ast$	59	-5	25.7	0.60	4.7	Palmetto	56	13	34.6	0.30	T.
Kipp $\dagger$	53	-21	25.6	0.59	3.8	Lyons	60	6	34.0	T.	T.	Panaca	65	9	32.4	0.25	
Lewistown	55	-10	30.1	0.80	7.5	McCook $\ast$	60	1	34.0	0.50	5.0	Reno $\ast$	70	20	41.0	1.47	1.2
Livingston $\dagger$	56	10	34.5	0.23	2.2	Madison	52	4	27.2	0.70	6.5	Reno State University	66	20	39.0	1.47	2.8
Manhattan $\dagger$	54	3	31.2	0.11	1.0	Marquette	65	0	34.6	0.50	5.0	Ruby Valley	56	9	32.4	0.27	
Martindale $\dagger$	55	2	31.4	0.18	1.0	Merriman	63	2	32.4	0.44	4.9	St. Thomas	65	10	37.6	0.05	
Marysville $\dagger$	50	5	30.8	0.47	3.3	Minden $a$	63	8	30.7	0.15	1.0	San Antonio	62	15	39.3	2.0	
Monarch	56	-15	32.0	0.60	7.5	Minden $b$	49	-4	25.4	0.70	5.0	Silverpeak	69	9	34.8	0.20	
Parrot	55	7	34.7	0.04	0.4	Monroe	58	-3	30.2	0.40	4.0	Sodaville	56	0	30.0	0.18	2.0
Poplar	52	-21	17.2	0.60	6.0	Nebraska City $b$	58	0	38.9	4.0	4.0	Tecoma $\ast$	54	-2	29.6	0.47	5.0
Redlodge	52	-2	28.0	1.52	15.0	Nebraska City $c$	58	0	30.8	2.32	1.5	Toano $\ast$	47	2	29.2	0.73	8.0
St. Ignatius Mission	55	8	35.6	0.86	.....	Nemaha $\ast$	57	-2	30.4	3.30	4.0	Tuscarora	54	15	35.3	0.15	2.0
St. Pauls $\dagger$	54	-11	30.6	0.01	0.3	Nesbit	57	8	30.7	0.15	1.0	Tybo	76	15	43.4	0.91	10.0
Troy $\dagger$	54	10	33.2	.....	North Loup	58	1	32.2	0.68	6.8	Wadsworth $\ast$	60	14	35.9	0.05		
Utica	50	9	29.8	0.27	1.5	Oakdale $\dagger$	50	5	26.0	0.78	7.3	Wells	49	0	29.4	0.72	.....
Virginia City $\dagger$	50	7	30.2	0.33	2.0	Odell $\ast$	56	0	30.8	2.32	1.5	<b>New Hampshire.</b>					
Wibaux	54	-19	23.8	T.	Redcloud $a$	60	-7	35.2	0.15	1.5	Alstead	48	-12	24.5	4.76	32.9	
Yale	55	5	30.1	0.37	3.8	Redcloud $b$ $\ast$	60	4	33.1	0.25	2.5	Bethlehem	50	-30	21.5	8.16	79.0
<b>Nebraska.</b>					Republican $\ast$	60	0	29.8	0.20	2.0	Brookline $\ast$	45	-13	24.6	5.36	44.5	
Agee $\ast$	57	-6	26.9	0.63	4.0	Rulo $\ast$	52	0	28.5	0.22	2.2	Claremont	54	-24	27.6	3.57	28.0
Albion	53	-5	28.1	0.67	8.2	Plattsmouth $\ast$	52	0	28.5	0.22	2.2	Concord	52	-32	24.8	4.26	22.0
Alliance $\ast$	57	1	26.2	T.	Platteville	60	1	32.2	0.68	6.8	Durham	51	-18	26.8	3.03	17.0	
Alma $\ast$	64	-2	30.7	0.20	2.0	Redcloud $a$	60	7	35.2	0.10	1.5	Grafton $\dagger$	50	-33	23.8	3.97	42.5
Anasley $\dagger$	60	-3	30.5	0.45	4.5	Redcloud $b$ $\ast$	60	4	33.1	0.25	2.5	Hanover	46	-22	24.3	8.99	31.8
Arapaho $\ast$	60	6	32.5	T.	Republican $\ast$	60	4	33.1	0.25	2.5	Keene	55	-28	25.0	3.22	24.0	
Arborville $\ast$	57	0	30.7	0.31	3.0	Rulo $\ast$	52	4	33.2	1.30	0.0	Lancaster	50	-31	22.7	3.56	34.0
Ashton $\dagger$	54	-2	29.6	0.83	6.0	Springview	56	-9	28.7	0.12	1.2	Littleton	49	-13	26.2	3.02	27.2
Ashton $b$ $\ast$	56	-2	31.1	0.75	.....	St. Library	58	0	32.0	0.80	8.0	Nashua	53	-20	29.9	4.57	22.2
Auburn $\ast$ $\dagger$	60	4	29.8	0.40	4.0	St. Paul	56	0	32.7	0.56	5.5	Newton	54	-12	27.4	3.61	7.0
Aurora $\ast$	56	0	29.0	2.11	3.0	Salem $\ast$	54	2	32.2	2.25	T.	North Conway	52	-27	24.2	6.33	36.0
Beatrice $\dagger$	57	0	29.4	1.92	3.0	Santee Agency $\ast$	53	-1	26.6	0.99	10.5	Peterboro	51	-21	24.0	4.09	28.8
Beaver City $\dagger$	68	5	36.2	0.02	T.	Sargent					Plymouth	47	-38	24.4	3.56	28.3	
Benedict						Schuyler					Sanborn $\ast$	47	-15	23.1	3.04	27.5	
Benkelman						Seneca $\ast$	56	2	32.6	0.00		Stratford	42	-25	23.8	2.23	32.3
Blair	50	-4	26.1	1.0		Seward $\ast$	52	0	29.8	0.20	2.0	Warner	42	-30	19.8	4.82	48.2
Bluehill						Stockham					<b>New Jersey.</b>						
Brokenbow $\ast$	50	0	30.8	0.10	1.0	Strang $\ast$	55	2	32.2	0.40	3.0	Ashbury Park	61	0	33.8	4.43	3.5
Burchard						Stratton					Bayonne	62	5	33.4	4.59	4.2	
Burwell						Superior $\ast$	52	4	31.0	0.80	3.0	Belvidere	55	-4	30.0	3.07	...
Callaway $\dagger$	62	2	31.0	0.15	1.0	Sutton	57	0	29.6	1.16	5.3	Beverly $\ast$	62	-1	34.5	3.08	0.2
Camp Clarke						Syracuse					Billingsport $\ast$	58	7	33.2	3.43	...	
Central City $\ast$	56	-2	31.6	0.30	3.0	Tablerock					Boonton	57	1	31.2	4.08	1.0	
Chester $\ast$	56	4	31.8	0.95	0.5	Tecumseh $b$ $\dagger$	53	-4	29.5	0.87	1.5	Bridgeton	62	11	36.2	3.81	1.0
Cody						Tekamah	50	-4	27.2	0.12	1.0	Camden	60	4	33.3	3.45	0.7
Columbus $\dagger$	54	-3	29.4	0.48	4.2	Theford $\ast$	56	-2	28.3	0.60	4.0	Cape May C. H. $\dagger$	64	10	35.2	1.80	0.5
Cornlea						Turlington	48	-7	24.2	1.23	2.5	Charlotteburg	55	-5	35.0	3.99	...
Creighton $\dagger$	49	-6	24.5	1.50	5.0	Valentine $\dagger$	60	-6	31.1	0.28	.....	Clayton	63	4	34.8	3.37	0.3
Crete	58	-5	32.9	1.23	1.3	Wakefield	43	-8	23.4	0.58	5.8	College Farm $\dagger$	60	-5	34.0	3.49	1.7
Culbertson						Wallace	57	8	35.2	0.10	1.0	Deckertown	57	-3	29.6	3.42	7.5
Dallin						Weeping Water $\ast$	51	2	27.0	1.07	3.0	Dover	58	-4	29.5	3.11	2.0
Dannebrog $\ast$	60	0	33.7	0.71	5.5	Westpoint $\dagger$	50	0	27.4	0.70	6.2	Egg Harbor City	60	1	33.5	2.54	1.5
David City	53	-3	28.2	0.50	5.0	Whitman					Elizabeth $\dagger$	62	-2	31.8	3.55	...	
Dawson	62	-2	33.2	2.16	8.0	Wilber $\ast$	60	4	35.4	1.04	2.0	Englewood	59	-11	34.8	4.59	...
Divide						Willard					Franklin Furnace	65	-5	30.0	3.50	6.0	
Dunning $\ast$	61	12	34.0	0.25	2.5	Wilsonville $\ast$	64	6	34.6	0.15	1.5	Freehold	59	2	33.4	5.08	3.5
Eden						Wishner					Friesburg	62	4	34.5	3.27	T.	
Edgar $\ast$	56	2	31.2	0.36	4.0	Wynore $\ast$	57	3	32.6	1.45	2.0	Gillette	58	-5	30.2	3.48	2.0
Elba						York $\ast$	60	0	30.6	0.70	7.0	Hammonton	55	-6	30.6	3.51	1.5
Ericson $\ast$ $\dagger$	55	-8	26.0	0.40	4.0						Hanover	59	3	33.6	3.12	2.5	
Ewing $\dagger$											Hightstown	59	0	33.6	2.98	1.4	
Fairbury $\dagger$	61	4	32.9	1.09	1.5						Imlaytown	59	3	33.6	2.98	4.0	
Fairfield	55	2	32.0	0.21	2.0						Junction						
Fairmont $\dagger$	60	1	28.2	0.60	1.0						Lambertville	59	0	32.9	3.05	2.0	
Fort Robinson	61	-4	30.5	0.20	2.0						Moorestown	63	1	35.0	3.46	T.	
Franklin	68	-5	34.6	0.30	3.0						Newark $\dagger$	61	4	32.7	4.33	0.5	
Fremont $\dagger$	53	-5	28.4	0.67	3.5						New Brunswick $a$	62	-1	33.9	3.72	2.5	
Genoa	53	-5	31.4	0.87	4.0						Newton	56	-1	34.6	3.24	...	
Gordon	53	-3	28.9	0.94	9.2						Oceanic	58	1	33.6	5.44	2.0	
Gothenburg $\ast$	64	2	32.6	0.40	4.0						Paterson	65	4	34.1	5.45	4.5	
Grand Island $a$ $\ast$	66	33	0.65	6.5							Perth Amboy	58	3	32.1	4.01	1.0	
Grand Island $b$	58	0	31.4	0.73	7.5						Plainfield	59	-3	31.2	3.88	2.3	
Greely $\ast$	50	-8	27.6	0.50	5.0						Port Norris	59	9	36.2	2.35	...	
Hagliar											Ranocucas						
Hartington $\dagger$	47																

TABLE II.—*Meteorological record of voluntary and other cooperating observers—Continued.*

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.	
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.
<i>New Mexico—Cont'd.</i>																	
Buckmans.	0	—8	23.4	0.42	4.5	North Lake.	0	—31	20.2	2.82	16.5	North Dakota—Cont'd.	0	—8	5.3	0.70	7.0
Clayton.	79	10	43.4	0.05	0.5	Number Fourt.	48	—23	23.0	3.12	17.7	Bottineau.	41	—26	5.3	0.29	2.9
Deming *8.	72	34	50.6	T.		Nunda.	61	—8	27.6	1.55	10.5	Buxton.	48	—23	10.6	0.29	6.4
East Lasvegas†.	63	13	38.8	0.21	3.5	Ogdensburg.	49	—17	22.0	1.86	8.2	Churchs Ferry.	55	—27	10.4	0.64	6.4
Eddy.	79	13	48.2	0.20		Oneonta.	54	—8	27.6	3.66		Coal Harbor.	54	—20	13.5	0.46	4.6
Engle†.	67	20	44.8	0.00		Oxford.	48	—13	25.8	3.11	14.0	Devlis Lake.	58	—15	11.8	1.05	10.5
Espanola.	65	10	36.2	0.00		Palermo.	47	—14	24.5	2.50	18.0	Dickinson.	54	—17	19.5	0.20	2.0
Folsom.	64	12	35.9	0.14	0.5	Penn Yan.	57	—3	38.1	1.40	11.3	Dunseith.	43	—28	9.6	0.40	4.0
Fort Bayard.	72	21	44.6	0.00		Perry City.	52	—10	25.8	1.68	14.4	Ellendale.	54	—20	19.8	0.17	2.0
Fort Union.	73	11	40.2	0.60	2.0	Phoenix.	.....	.....	1.60	.....	.....	Falconer.	56	—23	15.6	0.50	5.0
Fort Wingate.	69	12	37.8	0.30		Pine City.	.....	.....	1.22	.....	.....	Fargo†.	52	—26	10.2	0.10	1.0
Gallistee†.	74	17	37.5	0.50	5.0	Plattsburg Barracks†.	46	—11	22.0	4.38	7.0	Formant†.	55	—21	14.1	0.17	2.0
Gallinas Spring†.	68	11	41.5	0.12	1.0	Poughkeepsie.	51	—11	27.0	3.23	8.0	Fort Berthold.	61	—20	14.0	0.40	4.0
Gila.	74	26	47.4	0.08		Primrose.	56	—5	30.4	2.45	1.2	Fort Yates†.	61	—18	18.1	0.45	4.5
Hillsboro.	84	24	50.2	0.13		Ridgeway.	60	—1	27.2	1.66	11.6	Fullerton.	58	—19	15.8	0.40	4.0
Laluz.	72	22	48.7	0.17		Rome.	40	—13	22.6	2.38		Gallatin†.	54	—34	11.6	0.50	5.0
Las Cruces†.	78	16	46.6	0.02		Romulus.	51	0	28.0	1.81	15.0	Glenullin.	53	—21	17.6	0.20	2.0
Lordsburg *8.	86	30	50.2	0.00		Rose.	.....	.....	2.43	.....	.....	Goetz.	50	—30	11.0	0.62	6.2
Los Lunas.	68	15	39.2	0.85		St. Johnsville.	44	—13	24.8	2.48	10.1	Grafton†.	47	—32	8.8	0.60	6.0
Lower Penasco 4.	74	20	44.5	0.25		Saranac Lake.	54	—26	22.6	2.48	22.5	Grand Rapids†.	54	—20	15.5	0.34	3.4
Puerto de Luna.	73	19	44.2	0.00		Saratoga Springs.	53	—25	24.9	5.10	40.5	Hamilton.	41	—24	9.5	0.63	6.4
Raton.	65	12	37.4	T.		Setauket†.	51	7	32.1	4.82	4.0	Jamestown†.	65	—25	15.8	0.06	0.5
Rincon†.	82	20	49.8	0.00		Sherwood.	.....	.....	1.53	.....	.....	Kelso.	52	—22	10.1	0.00	
Roswell†.	79	14	45.1	0.86		Skaneateles.	.....	.....	2.10	.....	.....	Laramore†.	55	—26	8.7	0.70	7.0
Shattucks Ranch.	67	0	37.5	0.88	7.0	South Canisteo.	56	—6	27.4	2.09	15.8	McKinney.	46	—32	8.8	0.45	4.5
Socorro.	69	18	42.9	0.44		Southeast Reservoir.	.....	.....	4.18	.....	.....	Mayville.	53	—20	15.6	0.13	1.3
White Oaks†.	65	18	40.4	0.41	1.5	South Kortright†.	52	—9	25.6	2.88		Medorat.	53	—16	20.6	.....	.....
Winsors Ranch.	52	—4	28.2	0.90	12.0	Straits Corners.	54	—6	26.2	1.98		Melville.	53	—23	15.0	0.25	2.5
<i>New York.</i>						Ticonderoga.	46	—12	26.9d	4.88	39.0	Milton†.	45	—28	6.6	0.40	4.0
Adams.	54	—7	28.3	1.80	8.2	Victor.	58	—3	26.6	3.04	19.5	Minnewaukon.	56	—24	11.2	0.24	2.4
Addison.	54	—8	28.3	2.36		Wappingers Falls.	51	—15	27.7	4.51	10.5	Minot.	52	—25	13.2	0.60	6.0
Akron.	61	—2	27.3	1.84	12.5	Warwick.	58	—22	26.5	2.81		Minto†.	49	—31	10.2	0.62	6.4
Alden.	54	—11	24.8	1.46	8.5	Watertown.	58	—9	28.8	3.08		Napoleon†.	54	—18	15.2	0.65	6.5
Alfred.	56	—10	26.4	1.41	8.0	Watkins.	55	—9	28.6	2.02		New England City.	55	—17	18.5	0.90	9.0
Appleton.	58	0	27.0	1.77	14.6	Waverly†.	57	—13	27.6	1.70	9.0	Oakdale†.	52	—19	18.8	1.00	10.0
Arcade.	57	—4	25.8	1.66	13.6	Wedgewood.	54	—9	27.1	1.83	14.0	Portal.	45	—25	9.2	0.40	4.0
Arkwright.	52	0	27.2	.....		Westfield.	63	0	29.6	2.60	12.0	Power†.	53	—24	11.0	0.20	2.0
Atlanta.	56	—1	28.4	2.71	21.0	Westpoint†.	50 <sup>d</sup>	—7	24.9	3.60	6.3	St. John†.	45	—18	11.2	0.60	6.0
Auburn.	56	—1	28.4	2.71	21.0	Willets-point.	60	6	31.6	4.02		Sheyenne.	56	—28	11.8	0.80	8.0
Avon.	51	—6	28.5	1.51		<i>North Carolina.</i>	.....	.....	.....	.....	.....	Steele†.	53	—25	15.8	0.80	3.0
Baldwinsville.	53	—4	26.5	1.51	10.0	Ashbers.	73	4	37.6	0.80		Towner†.	50	—32	12.0	.....	.....
Bedford.	57	—10	30.1	3.69	2.7	Asheville†.	69	4	36.8	0.37	0.8	University.	48	—27	8.0	0.86	8.6
Binghamton†.	53	—3	27.6	2.71	10.7	Beaufort†.	71	15	46.3	1.20		Valley City†.	52	—19	13.2	0.60	3.0
Bolivar.	65	—14	25.2	1.76	10.0	Biltmore†.	69	7	37.0	0.57	0.1	Wahpeton†.	52	—19	18.2	0.65	6.5
Buckville.	44	—18	23.1	3.60	23.0	Bryson City†.	.....	.....	1.17	1.8		White Earth.	48	—20	15.6	0.22	2.2
Boyd's Corners.	56	—13	30.6	4.30	2.0	Chapelhill†.	71	11	36.0	1.03		Whites Ranch.	57	—20	24.5	0.33	3.3
Brentwood.	56	—13	30.6	4.30	2.0	Edenton.	69	16	42.2	1.38		Wildridge†.	57	—20	11.0	0.68	6.8
Brooklyn.	57	5	33.2	.....		Experimental Farm.	70	13	41.0	0.54		Willow City.	46	—32	12.1	0.30	3.0
Canajoharie.	47	—8	26.4	2.92	15.0	Fairbluff†.	.....	.....	0.93	.....	.....	Woodbridge†.	40	—26	8.1	0.06	0.6
Canton.	59	—31	23.4	3.13	18.0	Fayetteville†.	77	18	42.4	1.02		<i>Ohio.</i>	.....	.....	.....	.....	.....
Carmel.	53	—11	28.4	4.64	7.5	Flatrock.	63	4	38.4	0.67		Akron.	64	—6	28.2	2.76	12.5
Catskill.	50	—6	27.6	4.74	19.0	Greensboro†.	69	12	37.8	0.76		Annapolis.	67	—14	27.0	1.46	6.5
Cedarhill.	49	—9	26.6	3.28	15.5	Greenville.	66	11	42.4	0.59		Ashland.	62	—6	26.4	3.03	12.5
Charlotte *10.	58	0	27.9	.....	Henderson†.	68	11	39.0	0.87		Atwater.	62	—11	27.0	3.09	12.5	
Cherry Creek.	.....	.....	3.56	.....	Highlands.	56	—2	32.4	1.42		Bangorville.	62	—11	27.0	3.09	12.5	
Cooperstown†.	48	—7	24.7	2.93	18.0	Horse Cove.	60	3	36.1	1.50	0.7	Basil.	.....	.....	3.00	9.0	9.0
Cortland.	53	—3	26.8	2.99	19.0	Leinoir*†.	64	11	36.2	0.76		Bement.	.....	.....	3.08	18.0	18.0
Dekalb Junction.	.....	.....	1.85	.....	Linville†.	57	—5	29.4	0.90		Benton Ridge.	61	—6	28.8	2.73	11.5	
Dryden.	55	—1	25.4	.....	Littleton†.	67	10	37.8	0.62		Bethany.	64	—3	34.0	1.71	2.5	
Eagle Mills.	.....	.....	2.15	.....	Louisburg†.	68	11	39.4	0.77		Bigprairie.	64	—8	28.2	3.12	12.5	
Easton.	.....	.....	2.98	.....	Lumberton.	72	16	41.8	1.13		Binola.	61	—9	26.4	2.84	18.0	
Elizabethtown.	48	—40	24.0	5.10	51.0	Lynn†.	72	10	41.2	0.92		Bissells.	61	—9	26.4	2.84	15.2
Elmira.	57	—5	28.2	1.45	7.5	Mane.	.....	.....	0.54	.....	.....	Bloomingburg.	68	—9	31.4	1.82	2.0
Fleming.	57	0	28.7	1.11	5.0	Marion.	72	9	38.9	0.73		Bowling Green.	62	—6	28.3	2.04	9.8
Fort Niagara†.	58	—2	27.1	1.42	13.0	Mocksville.	74	12	41.6	0.49		Bucyrus.	62	—11	28.4	2.00	14.0
Franklinville.	59	—6	24.6	1.98	12.3	Monroe†.	73	13	41.6	1.00		Cambridge.	67	—14	28.6	2.77	5.0
Fulton.	.....	.....	1.03	.....	Morganston.	74	10	41.6	0.84		Camp Dennison.	64	—2	34.3	1.94	1.4	
Garrattsville.	47	—10	26.1	1.75	1.5	Mount Pleasant.	74	9	39.8	0.67		Canal Dover.	67	—8	28.6	8.22	9.0
Glen Falls.	41	—14	23.4	3.83	29.5	Settle.	67	6	36.2	0.40	0.5	Canton†.	65	—5	28.5	2.43	7.7
Greenwich.	44	—12	23.8	3.83	30.3	Mount Pleasant.	71	10	39.8	1.18		Cardington.	65	—10	28.2	2.42	7.0
Haskinsville.	.....	.....	1.41	.....	.....	Carrollton.	67	—8	29.4	2.43		Cedarville.	67	—5	29.6	2.96	6.0
Honeymeade Brook.	50	—11	26.9	3.32	11.1	.....	69	8	37.8	0.79		Celina.	69	—7	31.0	1.87	2.0
Humphrey†.	60	—5	2														

TABLE II.—*Meteorological record of voluntary and other cooperating observers—Continued.*

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.	
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.
<i>Ohio—Cont'd.</i>																	
Greenhill	0	-12	28.0	1.95	5.2	Inns.	0	0	0	Inns.	Inns.	Pennsylvania—Cont'd.	0	0	0	Inns.	Inns.
Greenville	66	-6	30.1	1.69	8.0	Newkirk	67	14	41.4	3.08	T.	Drifton <sup>d</sup>	54	-4	27.6	.....	.....
Hackney	68	-9	30.5	1.93	3.1	Norman <sup>t</sup>	77	16	43.8	2.46	T.	Driftwood	.....	.....	1.95	.....	.....
Hanging Rock	70	-7	34.6	1.75	2.5	Pawhuska	71	17	42.4	2.25	T.	Duncannon	54	-16	26.8	1.91	8.5
Hedges	61	-7	29.2	2.29	10.0	Prudencet	10	.....	.....	.....	T.	Dushore	53	-12	25.5	8.12	11.5
Hillhouse	65	-9	26.8	2.78	20.0	Putnam <sup>c</sup>	76	13	44.2	1.33	T.	Dyberry	53	-16	26.8	1.91	8.5
Hillsboro <sup>t</sup>	68	-8	33.3	2.03	1.5	Sac and Fox Agency	78	11	45.3	1.73	T.	East Bloomsburg	58	-16	26.8	1.20	0.6
Hiram	65	-10	25.7	2.40	11.0	Stillwater <sup>t</sup>	73	15	43.6	3.00	T.	East Mauch Chunk	60	-10	29.6	1.87	1.5
Hudson	64	-11	27.5	4.11	16.0	Waukomis	72	17	43.5	3.25	T.	Easton	52	-2	31.3	8.70	8.0
Jacksonboro	64	-4	32.1	1.35	1.0	Oregon.	68	31	47.0	7.05	T.	Ellwood Junction <sup>t</sup>	.....	.....	2.25	.....	6.2
Kenton	65	0	30.3	3.16	10.3	Albany <sup>a</sup>	65	28	44.4	0.57	T.	Emporium	58	-11	27.0	1.47	10.2
Killbuck	65	-9	28.0	2.14	12.0	Arlington	65	24	44.6	1.38	T.	Everett	61	-1	28.6	1.17	5.6
Lancaster	65	-7	31.2	2.92	4.5	Ashland <sup>b</sup>	64	30	45.0	5.85	T.	Farrandsville	.....	.....	1.38	.....	7.0
Leipsic	61	-9	29.5	2.18	5.2	Aurora <sup>*s</sup>	62	29	45.5	6.26	T.	Forks of Neshaminy <sup>*1</sup>	62	4	34.6	9.99	.....
Levering	62	-14	26.8	2.74	12.0	Aurora (near)	63	33	49.2	8.27	T.	Franklin	64	-8	27.0	1.48	6.0
Logan	71	-10	32.8	3.11	2.5	Bandon	64	33	46.1	29.39	T.	Frederick	.....	.....	8.34	.....	.....
Lordstown	66	-10	26.6	1.88	5.8	Bay City <sup>t</sup>	60	5	33.1	0.36	2.4	Freeport	.....	.....	2.30	5.0	.....
McArthur	67	-13	30.6	2.72	2.0	Brownsville <sup>*s</sup>	68	31	47.6	3.72	T.	Girardville	56	-8	25.0	2.06	16.0
McConnellsburg <sup>t</sup>	70	-8	30.2	3.70	10.9	Burns	51	4	30.2	.....	T.	Grampian	70	-9	31.6	2.06	6.0
Mansfield <sup>t</sup>	.....	.....	4.09	16.7	Burns (near)	61	12	38.7	0.11	0.2	Hamburg	57	0	31.6	1.74	1.0	
Marietta <sup>b</sup>	67	0	33.8	2.39	2.5	Cascade Locks	56	34	43.2	14.48	T.	Hawley	59	-8	27.2	1.71	12.9
Marion	64	-9	30.0	3.31	10.2	Comstock <sup>*s</sup>	67	31	47.3	3.93	T.	Hollidaysburg	63	-4	29.2	1.21	5.5
Medina	63	-8	27.5	2.44	11.0	Corvallis	65	29	45.7	5.48	T.	Huntingdon <sup>a</sup>	58	-5	29.6	1.47	7.5
Mifflordton	63	-14	26.6	2.56	2.0	Dayville <sup>t</sup>	65	21	43.8	3.45	T.	Huntingdon <sup>b</sup>	.....	.....	1.12	5.9	.....
Milligan	69	-20	30.7	2.81	6.0	Eugene	68	34	45.8	3.45	T.	Indiana	70	-4	29.0	1.44	10.3
Milport	65	-17	26.2	2.42	4.0	Fairview	60	33	46.8	8.09	T.	Irwin	.....	.....	1.47	.....	.....
Montpelier	57	-7	26.4	1.95	8.0	Falls City	63	29	43.9	12.65	T.	Johnstown <sup>t</sup>	64	-4	29.4	2.73	12.0
Napoleon	.....	5	2.24	7.0	Forestgrove	64	29	43.0	7.81	1.0	Karthaus	.....	.....	1.18	16.0	.....	
Neapolis	.....	.....	1.28	3.5	Fort Klamath	55	7	31.0	2.81	10.2	Keating	.....	.....	1.82	8.3	.....	
New Alexandria	66	-6	29.8	2.67	4.0	Gardiner	36	.....	13.25	.....	Kennett Square	63	0	33.4	3.43	0.3	
New Berlin	64	-10	27.4	2.16	5.5	Glenora	57	28	41.0	23.86	T.	Lansdale	.....	.....	9.04	.....	.....
New Bremen	64	-7	30.5	0.85	3.1	Government Camp	51	16	34.4	12.94	T.	Lawrenceville	56	-11	27.2	1.26	5.8
New Holland	67	-5	32.2	2.05	5.2	Grants Pass <sup>a</sup>	66	24	45.0	3.70	T.	Lebanon	57	-1	31.4	1.59	1.7
New Paris	61	-7	30.5	1.21	3.0	Junction City <sup>*s</sup>	66	30	47.9	3.49	T.	Leroy <sup>t</sup>	58	-10	26.4	2.05	9.7
New Waterford	63	-7	28.1	3.30	12.0	Klamath Falls	54	16	36.1	0.91	1.0	Lewisburg	56	-7	28.8	2.27	8.0
North Lewisburg	64	-8	29.2	2.72	4.2	Lafayette <sup>*s</sup>	60	30	43.9	4.67	T.	Lock Haven <sup>a</sup>	59	-2	29.6	1.51	8.0
North Royalton	63	-9	27.6	2.26	12.0	Lakeview <sup>t</sup>	59	10	34.9	1.04	1.5	Lock No. 4 <sup>t</sup>	.....	.....	1.71	4.1	.....
Norwalk	64	-7	28.8	2.85	12.5	Langlois	68	31	50.1	22.12	T.	Lycippus	72	-4	30.0	1.80	13.2
Oberlin	67	-7	28.7	2.25	2.5	Lone Rock	57	18	39.3	0.78	T.	Mifflin	.....	.....	1.50	1.0	.....
Ohio State University	65	-5	30.3	1.79	1.4	Morlo	59	27	40.3	0.36	0.2	Oil City <sup>t</sup>	.....	.....	2.53	13.3	.....
Orangeville	61	-8	26.8	2.25	11.0	Mount Angel <sup>t</sup>	63	32	46.0	6.56	0.5	Ottsville	.....	.....	3.20	.....	.....
Ottawa	62	-5	31.0	2.34	8.5	Newberg	62	28	45.0	7.57	T.	Parker	.....	.....	2.52	9.5	.....
Pataksala <sup>t</sup>	66	-11	23.3	2.62	7.2	Newbridge	57	6	35.4	0.63	1.5	Philadelphia <sup>b</sup>	61	7	36.0	3.20	1.0
Perry	.....	.....	2.62	11.5	Newbridge	57	13	44.4	0.30	0.8	Point Pleasant	.....	.....	8.34	.....	.....	
Philo	66	-6	30.4	2.62	9.6	Newport	63	27	47.2	18.01	T.	Pottstown	58	-2	33.2	3.55	0.5
Plattsburg	63	-8	30.3	1.93	4.0	Pendleton	66	32	44.8	2.06	T.	Quakertown	59	-6	30.3	8.64	1.0
Pomeroy	69	-2	32.8	1.05	5.5	Prineville	72	11	43.8	0.71	T.	Reading <sup>t</sup>	.....	.....	3.02	2.15	.....
Portsmouth <sup>a</sup>	.....	.....	1.69	T.	Riddle <sup>s</sup>	68	28	45.5	2.50	T.	Reedsville	45	-4	27.8	.....	.....	
Portsmouth <sup>b</sup>	70	0	35.2	1.65	T.	Riverside	63	4	35.8	0.25	T.	Renovo <sup>a</sup>	57	-4	29.0	1.71	8.7
Richwood	61	-8	29.8	2.48	6.5	Salem <sup>b</sup>	67	28	45.2	5.64	T.	Ridgway <sup>t</sup>	.....	.....	1.87	16.0	.....
Ridgeville Corners	60	-8	27.8	1.52	6.5	Salem <sup>t</sup>	62	26	42.6	2.87	T.	Seagerstown	61	-8	28.0	3.02	19.5
Riley	68	-3	34.2	2.63	1.8	Sheridan <sup>*s</sup>	65	31	46.1	5.46	T.	St. Marys	54	-6	33.8	1.24	10.0
Rittman	63	-10	26.4	2.49	5.0	Silver Lake	60	13	44.4	0.30	0.8	Salem Corners	53	-4	27.2	3.34	10.0
Rockyridge	62	-6	28.1	2.45	11.2	Silverton <sup>*s</sup>	64	34	44.5	6.43	T.	Scranton	57	-2	29.1	2.41	12.0
Rosewood	61	-6	29.8	1.77	4.0	Siskiyou <sup>*s</sup>	74	22	40.3	1.70	17.0	Seisholtzville	55	-3	29.0	2.06	2.0
Shenandoah	63	-10	26.7	2.56	9.6	Sparta	52	18	31.8	2.15	T.	Shawmont	55	-12	27.8	2.73	.....
Sidney <sup>b</sup>	65	-5	29.4	1.85	5.9	Springfield <sup>*s</sup>	63	4	35.8	0.25	T.	Shinglehouse	65	-12	27.8	1.24	4.0
Sinking Spring <sup>t</sup>	64	-4	33.5	2.07	T.	Stafford	67	28	45.2	5.64	T.	Sinnamahoning	.....	.....	1.11	4.0	.....
Somerset <sup>t</sup>	66	-5	32.6	2.81	15.3	The Dalles <sup>t</sup>	65	31	47.5	5.08	T.	Smethport	61	-10	25.6	1.35	7.0
Springboro	.....	.....	1.85	3.0	Tillamook Rock	68	28	44.0	3.16	T.	Smith's Corners	.....	.....	3.27	.....	.....	
Spring Valley	62	-6	31.0	1.98	3.0	Toledo	64	28	45.4	10.60	0.2	Somerset	63	-8	25.7	3.11	14.4
Strongsville	.....	.....	3.07	7.8	Umatilla	60	-1	27.9	1.23	.....	South Bethlehem	56	1	31.0	.....	.....	
Sylvania	57	-7	26.5	2.13	10.0	Vale	56	0	34.8	0.37	0.5	South Eaton	57	-4	28.8	1.43	8.0
Thurman	72	-3	34.5	1.53	1.3	Vernonia	70	23	42.4	8.91	8.0	South College	55	0	27.5	1.14	4.1
Tiffin <sup>t</sup>	62	-4	29.5	2.46	12.8	West Fork <sup>*s</sup>	62	30	43.8	4.18	T.	Sunbury	59	0	27.5	0.80	.....
Upper Sandusky	63	-7	29.6	2.24	13.0	Weston	64	22	44.2	.....	T.	Swarthmore	59	4	33.3	3.25	.....
Urbana	61	-5	30.0	2.01	8.5	Williams	66	22	44.0	3.16	T.	Swiftwater	51	-5	26.0	3.35	2.0
Vanceburg	67	-4	34.3	2.65	5.5	Williams	59	-1	27.9	2.2	T.	Towanda	58	-4	28.6	1.48	6.0
Vanwert	63	-7	28.6	2.04	8.5	Williams	59	0	34.8	0.37	0.5	Trot Run	58	0	31.0	3.56	9.0
Vermilion	64	-6	28.2	2.20	13.6	Williams	59	0	34.8	0.37	0.5	Uniontown	.....	.....	1.73	5.0	.....
Vickery	68	-5	29.0	1.82	11.1	Williams	59	0	34.8	0.37	0.5	Warren <sup>t</sup>	59	-10	28.0	1.69	

TABLE II.—*Meteorological record of voluntary and other cooperating observers—Continued.*

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.														
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.													
<i>South Carolina—Cont'd.</i>	o	o	o	Ins.	Ins.	<i>Tennessee—Cont'd.</i>	o	o	o	Ins.	Ins.	<i>Texas—Cont'd.</i>	o	o	o	Ins.	Ins.													
Cheraw b†.....	71	10	41.0	1.48	0.97	Carthage.....	69	8	40.8	1.98	1.7	Huntsville.....	79	23	53.6	5.15	5.15													
Clemson College.....	71	12	42.5	1.15	1.0	Charleston.....	70	8	40.6	0.80	1.0	Jacksonville.....	77	21	53.8	3.41	3.41													
Conway t.....	72	12	42.0	1.82	1.00	Clarksville.....	70	8	40.6	0.69	0.7	Jasper.....	85	29	57.0	4.40	4.40													
Darlington (near).....	71	12	41.5	0.81	0.71	Clinton.....	68	8	40.5	0.86	3.0	Kent.....	82	23	51.6	0.00	0.00													
Edisto t.....	70	16	44.2	0.69	0.57	Decatur t.....	64	8	39.1	0.97	2.8	Kerrville.....	78	23	52.6	0.35	0.35													
Effingham t.....	73	12	40.2	0.84	0.73	Dover.....	74	8	41.9	1.26	T.	Lampasas t.....	82	29	52.9	0.78	0.78													
Florence t.....	70	16	44.2	0.69	0.57	Dyersburg.....	68	16	42.5	1.88	T.	Llano t+5.....	84	29	55.1	0.50	0.50													
Gaffney t.....	73	12	40.2	0.73	0.61	Elizabethton t.....	68	8	34.6	1.04	2.0	Longview t.....	78	23	52.4	2.86	2.86													
Georgetown t.....	73	19	47.6	2.00	1.44	Elk Valley.....	67	3	37.6	1.41	8.1	Luling t.....	81	32	57.0	4.87	4.87													
Gillisonville.....	78	12	49.0	0.74	0.63	Erasmus.....	—	5	—	1.56	7.5	Maun.....	79	20	54.6	2.03	2.03													
Greenville t.....	74	12	40.2	0.80	0.69	Fairmount *6.....	58	6	36.4*	0.96	1.2	Marathon.....	79	—	—	0.00	0.00													
Greenwood.....	73	15	43.0	0.57	0.46	Florence t.....	70	9	40.9	0.80	T.	Marshall.....	76	23	53.4	3.19	3.19													
Holland.....	72	11	40.5	1.03	0.92	Franklin.....	70	9	40.5	0.63	T.	Menardville.....	85	19	52.8	0.35	0.35													
Kingstree a†.....	74	14	42.6	1.04	0.93	Grace *1.....	70	6	41.8	1.95	5.0	Missouri City.....	81	33	59.4	3.33	3.33													
Kingstree b.....	73	12	40.2	1.04	0.93	Greeneville t.....	67	1	37.0	0.68	1.6	Mount Blanco t.....	80	15	44.7	0.06	0.06													
Little Mountain.....	76	11	44.1	0.64	0.53	Hartman.....	63	8	38.6	0.87	2.0	New Braunfels t.....	80	31	57.0	1.16	1.16													
Longshore t.....	72	11	42.2	0.83	0.72	Hohenwald t.....	71	8	41.2	1.29	T.	Panter.....	—	—	—	1.43	1.43													
Mount Carmel t.....	72	12	40.2	0.43	0.32	Jackson t.....	69	14	43.1	2.40	T.	Point Isabel *1.....	82	58	66.6	0.15	0.15													
Pinopolis *1.....	72	20	46.7	0.67	0.56	Johnsville.....	74	10	42.3	0.98	0.7	Rheinland t.....	82	24	49.1	2.68	2.68													
Port Royal t.....	72	24	50.9	0.52	0.41	Jonesboro *1.....	63	—	35.2	0.93	2.8	Roby.....	—	—	—	1.42	1.42													
St. Georges t.....	73	17	46.0	0.34	0.23	Kingston t.....	—	—	—	0.60	1.4	Rockport *1.....	78	46	61.6	—	—													
St. Matthews t.....	77	11	44.8	0.88	0.77	Lafayette.....	—	—	—	1.25	6.0	Rocksprings.....	—	—	—	0.20	0.20													
St. Stephens t.....	71	12	40.2	0.75	0.64	Liberty t.....	72	10	40.4	1.21	0.8	Runge t.....	84	33	60.0	3.30	3.30													
Santuck t.....	71	10	41.4	0.96	0.85	Lynnhaven t.....	70	11	41.1	1.48	T.	San Antonio.....	86	33	59.9	1.22	1.22													
Shaws Fork.....	77	11	44.0	0.66	0.55	McKenzie t.....	72	11	42.0	1.34	T.	San Marcos t†.....	81	27	54.8	0.54	0.54													
Smiths Mills t.....	72	12	40.2	1.45	1.34	McMinnville.....	67	6	39.9	0.47	0.8	Sulphur Springs t.....	81	18	53.4	2.35	2.35													
Society Hill t.....	72	16	48.5	1.19	1.08	Newmarket *5.....	67	7	38.4	0.83	1.8	Temple a.....	80	23	53.3	2.58	2.58													
Spartanburg.....	70	14	39.8	0.70	0.59	Newport t.....	67	8	38.1	0.94	1.0	Tulia.....	79	14	42.2	0.18	0.18													
Statesburg f.....	75	17	45.6	1.12	1.01	Nunnelly.....	72	8	41.8	0.71	T.	Tyler.....	76	19	50.4	3.08	3.08													
Trenton.....	72	20	47.5	0.52	0.41	Oak Hill *1.....	68	6	38.9	1.87	3.9	Valentine t.....	—	—	—	0.00	0.00													
Trial.....	75	12	45.6	0.62	0.51	Palmetto t.....	71	10	41.9	0.97	0.2	Victoria.....	—	—	—	3.40	3.40													
Walhalla.....	75	10	40.8	0.60	0.49	Perryberg *6.....	70	10	41.8	1.50	T.	Waco t.....	81	24	53.4	1.51	1.51													
Wbinsboro.....	73	11	42.6	0.59	0.48	Pope.....	74	10	42.4	0.81	T.	Waxahachie t.....	81	16	50.5	2.80	2.80													
Yemassee t.....	76	18	48.0	0.90	0.79	Rogersville t.....	65	5	36.8	1.18	1.8	Weatherford t.....	79	19	51.0	2.15	2.15													
Yorkville.....	74	14	44.5	1.07	0.96	Rugby.....	62	—	35.2	2.57	15.0	Wichita Falls t.....	—	—	—	2.00	2.00													
<i>South Dakota.</i>																														
Aberdeen t.....	55	—19	19.0	0.10	1.0	Savannah.....	73	13	42.8	1.35	T.	<i>Utah.</i>																		
Alexandria t.....	55	—9	22.4	0.22	3.0	Sewanee t.....	64	4	37.8	1.76	1.5	Alpine t.....	54	12	29.9	0.45	0.45	Blue Creek *8.....	54	12	29.9	T.	T.	Brigham t.....	—	—	—	0.76	0.76	
Armour.....	54	—8	24.0	0.53	5.0	Silver Lake.....	—	—	—	0.99	6.4	Cisco t.....	47	—10	16.4	T.	T.	Springdale.....	68	2	37.6	3.1	3.1	Corinne.....	54	1	29.4	0.15	0.15	
Ashcroft t.....	50	—14	28.4	0.45	1.5	Sylvia.....	72	5	40.1	1.04	T.	Ferron.....	55	0	31.0	0.40	4.0	Tazewell.....	—	—	—	—	—	Fillmore t.....	64	—	32.0	1.20	1.20	
Bowdle.....	61	—22	18.3	0.10	1.0	Tellico Plains t.....	70	8	40.4	0.73	1.7	Fort Duchesne t.....	37	—21	8.2	0.10	1.0	T.	Tracy City.....	63	5	37.1	4.0	4.0	Fortress.....	64	12	32.0	1.20	1.20
Brookings t.....	52	—14	19.9	0.55	5.5	Trenton.....	67	12	41.6	1.99	T.	Frisco.....	56	14	36.4	0.10	1.0	T.	T.	61	—	32.0	1.20	1.20						
Canton.....	46	—9	22.4	0.50	4.5	Tullahoma t.....	67	8	39.8	1.23	1.2	Giles t.....	54	—10	21.9	0.20	2.0	T.	W.	62	—	32.0	1.20	1.20						
Centerville.....	59	—11	20.5	0.50	5.2	Waynesboro.....	71	10	41.2	1.61	T.	Heber.....	54	—8	25.4	0.50	5.0	T.	W.	63	—	32.0	1.20	1.20						
Chamberlain t.....	59	—5	28.0	0.05	0.5	Wildersville.....	71	12	43.2	1.48	T.	Huntsville.....	—	—	—	0.67	0.67	T.	W.	64	—	32.0	1.20	1.20						
Clark.....	59	—5	28.0	0.10	1.0	Yukon.....	70	10	41.4	1.29	T.	Kelton *8.....	57	7	29.7	0.00	0.00	T.	W.	65	—	32.0	1.20	1.20						
De Smet.....	50	—8	20.2	0.70	7.0	T.	Levan t.....	56	—	32.0	0.71	T.	Leviton *8.....	55	4	30.7	0.25	1.5	T.	W.	66	—	32.0	1.20	1.20					
Doland.....	52	—16	20.6	0.20	2.0	T.	Loa t.....	54	—15	25.2	0.55	T.	Lopat.....	49	5	29.5	0.52	—	T.	W.	67	—	32.0	1.20	1.20					
Edgemont.....	55	—23	15.6	0.32	5.0	T.	Millville.....	—	—	—	—	T.	Lorang.....	—	—	—	0.53	0.53	T.	W.	68	—	32.0	1.20	1.20					
Farmington.....	59	—11	20.5	0.50	5.2	T.	Minersville.....	—	—	—	—	T.	Lovett.....	—	—	—	0.53	0.53	T.	W.	69	—	32.0	1.20	1.20					
Forestburg t.....	57	—12	21.7	0.30	3.0	T.	Moab t.....	59	0	28.6	0.13	T.	L.	—	—	—	—	—	T.	W.	70	—	32.0	1.20	1.20					
Forest City.....	62	—7	23.2	0.10	1.0	T.	Mount Pleasant t.....	57	5	33.4	0.70	T.	L.	—	—	—	—	—	T.	W.	71	—	32.0	1.20	1.20					
Fort Meade t.....	60	—5	30.9	0.15	1.4	T.	Ogden a.....	54	12	32.5	0.55	T.	L.	—	—	—	—	—	T.	W.	72	—	32.0	1.20	1.20					
Gann Valley.....	54	—8	24.4	0.10	1.0	T.	Ogden b.....	64	10	35.4	0.19	T.	L.	—	—	—	—	—	T.	W.	73	—	32.0	1.20	1.20					
Gary.....	59	—14	16.0	0.68	7.0	T.	Pahreah.....	66	—2	33.4	0.20	T.	L.	—	—	—	—	—	T.	W.	74	—	32.0	1.20	1.20					
Goudyville.....	60	—14	21.9	0.20	2.0	T.	Parowan t.....	58	—2	32.4	0.20	T.	L.	—	—	—	—	—	T.	W.	75	—	32.0	1.20	1.20					
Greenwood.....	56	—5	26.0	0.55	4.5	T.	Pinto.....	57	—2	32.4	0.20	T.	L.	—	—	—	—	—	T.	W.	76	—	32.0	1.20	1.20					
Harney.....	56	—8	31.3	0.14	2.0	T.	Promontory *8.....	56	—2	31.9	0.05	T.	L.	—	—	—	—	—	T.	W.	77	—	32.0	1.20	1.20					
Highmore.....	59	—10	22.4	0.01	—	T.	Provo.....	63	1	35.7	0.64	T.	L.	—	—	—	—	—	T.	W.	78	—	32.0	1.20	1.20					
Hoth City t.....	61	—1	28.4	0.03	—	T.	Richfield t.....	62	—	32.6	0.80	T.	L.	—	—															

TABLE II.—*Meteorological record of voluntary and other cooperating observers*—Continued.

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.	
Virginia—Cont'd.						West Virginia—Cont'd.						Mexico—Cont'd.						
Burke's Garden.....	0	0	0	Ins.	Ins.	Hinton a†.....	0	0	0	Ins.	Ins.	Topolobampo*.....	0	56	66.9	Ins.	Ins.	
Callaville†.....	67	7	37.3	0.70	3.2	Hinton b†.....	66	-4	33.8	0.91	4.0	New Brunswick.....	81	2	26.2	3.95	24.8	
Christiansburg.....				0.39		Huntington.....	70	1	34.3	2.88	1.5	St. John.....	39					
Clifton Forge.....	69	8	34.4	0.51	0.5	Kingwood.....	65	-4	29.8	2.56		West Indies.....						
Dale Enterprise†.....	67	-1	32.2	0.61	T.	Marlinton†.....	63	-9	30.0	1.47	3.0	Grand Turk Island.....						
Doswell.....	72	-5	35.2	0.79	T.	Martinsburg†.....	62	1	32.3	1.29								
Dwale.....				1.68	2.2	Morgantown b†.....	72	-5	33.4	1.68	2.0							
Farmville†.....	72	17	39.4	T.		Nuttallburg.....	70	-13	34.2			Late reports for January, 1898.						
Fredericksburg†.....	71	-4	35.8	1.19	2.0	Oldfields†.....	67	0	31.2	1.05	T.							
Grahams Forge.....	66	1	32.8	0.60	0.5	Point Pleasant†.....	71	1	35.0	1.93	1.0							
Guinea.....				0.90	T.	Powellton.....	68	0	33.9	2.07	6.3							
Hampton.....	68	16	41.0	1.49	T.	Romney.....	64	6	32.8	1.09								
Hot Springs.....	75	-4	35.2	0.79	T.	Rowlesburg†.....	74	4	34.0	0.64	T.							
Leesburg.....				0.60		Upper Tract.....	74			3.15	6.0							
Lexington†.....	68	4	34.8	0.77	0.5	Weston a.....	69	-8	31.4		9.0							
Maidens.....	70	8	37.8	1.15		Weston b*†.....				2.50	6.3							
Manassast.....	68	0	34.2	1.22	T.	Wheeling a†.....	67	2	33.6	2.50	4.5							
Marion†.....	67	-3	34.8	0.95	1.5	Wisconsin.....												
Monterey.....	62	0	29.0	1.23	2.2	Amherst.....	42	-11	18.8	1.17	11.6							
Petersburg†.....	72	9	39.0	0.78	T.	Barren.....	45	-24	17.0	1.83	12.0							
Radford.....				0.78	T.	Bayfield.....	44	-10	19.0	1.80	18.0							
Richmond (near)†.....	68	6	37.4	0.81	T.	Beloit.....	46	-7	24.0	1.29	14.0							
Rockymount†.....	70	8	38.4	0.60	T.	Brodhead.....	46	-9	22.6	2.04	14.0							
Salem†.....	60	9	39.2	0.58	T.	Butternut.....	59	-22	18.9	1.93	10.9							
Speers Ferry.....				2.19	5.0	Chilton.....	45	-11	22.4	0.91	18.0							
Spottsville†.....	68	9	38.7	1.26		Citypoint.....	43	-20	19.6	1.35	10.0							
Standardsville†.....	67	5	34.2	0.65		Defavan.....	49	-13	22.4	1.17	11.0							
Staunton†.....	73	5	35.4	0.55	T.	Dodgeville†.....	44	-9	21.6	1.62	19.5							
Stephens City†.....	68	4	33.9	1.22	T.	Easton.....	41	-11	19.8	0.65	8.5							
Sunbeam†.....	66	11	39.8	1.11		Eau Claire.....	44	-12	20.2	2.26	11.5							
Warrenton.....	64	11	36.4	0.58		Florence†.....	42	-12	12.8	1.35	11.0							
Warsaw†.....	66	8	35.8	1.33	1.0	Fond du Lac.....	49	-9		0.98	9.2							
Westbrook Farm.....	67	2	36.6	.....		Grand River Locks.....	49	-22	17.3	0.62	10.0							
Westpoint.....	73	0	31.0	1.50	T.	Grantsburg†.....	45	-15	21.7	1.60	11.0							
Woodstock†.....	71	4	34.5	0.60	T.	Gratiot.....	45			2.52	19.0							
Wytheville†.....	70	0	34.3	0.65	T.	Hartford.....	46	-11	22.4	1.84	21.8							
Washington.....						Hartland.....	46	-11	22.4	1.84	21.8							
Aberdeen.....	59	29	43.4	14.43	1.4	Harvey.....	45	-10	23.3	1.34	10.8							
Anacortes.....				2.88		Hayward.....	42	-27	18.6	0.98	5.6							
Ashford†.....				11.06	17.0	Hillsboro.....	48	-9	20.5	2.03	16.5							
Blaine†.....	62	22	38.6	5.54	1.5	Kenosha * <sup>10</sup> .....	44	-10	23.3									
Centerville†.....	65	22	40.0	1.08	0.6	Knapp.....	45	-13	20.1	1.04								
Chehalis†.....	58	34	43.0	2.87		Koepenick *†.....	48	-16	19.0	2.20	19.0							
Clearwater.....	56	31	43.4	25.05	3.3	Lancaster†.....	45	-8	21.2	1.56	18.5							
Cofax.....	59	23	39.0	2.75	1.5	Lincoln†.....	40	0	23.0	1.40	6.0							
Coupeville†.....	65	31	44.0	2.82	T.	Madison†.....	41	-8	20.3	2.42	21.9							
Dayton.....	66	24	43.6	1.69		Manitowoc†.....	44	-7	23.4	1.20	12.2							
Ellensburg.....	55	12	35.4	0.47		Meadow Valley†.....	43	-17	18.2	0.63	10.0							
Ellensburg (near).....	52	10	34.6	0.50	3.0	Medford†.....	55	-22	17.6									
Fort Simcoe†.....	68	24	40.4	1.54	2.0	Mensha.....				0.70	13.8							
Fort Spokane.....	48	13	34.2	1.80	6.5	New Holstein.....	43	-10	19.7	1.80	11.0							
Grandmound†.....	59	29	43.2	8.24	1.0	New London.....	41	-11	20.1	0.75	5.0							
Hunters†.....	48	5	30.6	2.33	8.5	North Crandon.....				1.40	12.0							
Kennewick†.....	67	24	44.1	0.52		Oconto.....	43	-7	23.0									
La Center.....	61	32	44.6	9.13	1.5	Osceola†.....	45	-11	18.5	1.13	5.3							
Lakeside.....	55	18	35.2	1.59	10.0	Pepin.....	45	-14	18.6	1.48	15.0							
Lapush.....	50	32	41.2	16.46	T.	Pine River†.....	42	-11	20.6	1.00	10.4							
Lind.....	59	12	38.2	0.81	2.0	Portage†.....	40	-12	19.0	0.74	10.0							
Loomis†.....	55	13	35.1	1.00	4.0	Port Washington.....	46	-11	24.6	3.76	33.0							
Madrone†.....	64	28	44.9	7.26		Prairie du Chien.....	50	-7	25.0	1.44	14.0							
Mayfield†.....	66	26	43.6	9.08		Racine.....	45	-9	26.0	2.37	38.0							
Moxee Valley†.....	65	17	40.2	0.51	0.1	Sharon.....	48	-8	20.8	2.26	20.5							
New Whatcom.....	67	29	45.4	2.40	0.2	Shawano.....	42	-9	20.8	0.98	10.2							
Northbend.....	55	21	42.6	10.92	2.0	Spooner.....	47	-22	18.6	1.85	12.0							
Olga.....	60	30	43.8	3.93	0.5	Stevens Point†.....	49	-13	19.8	1.19	8.2							
Olympia†.....	61	30	44.0	9.47		Sturgeon Bay Canal* <sup>10</sup> .....	44	-8	21.9									
Orcas Island.....	58	28	44.8	2.47		Valley Junction†.....	42	-15	19.2	1.83	16.5							
Pinehill†.....	61	28	40.9	2.69	1.0	Viroqua.....	42	-8	21.4	2.19	20.0							
Pomeroy.....	30			1.39	0.5	Watertown†.....	45	-12	22.1	3.14	22.5							
Port Townsend.....	64	38	45.0	2.64	T.	Waukesha†.....	44	-10	23.2	1.60	11.9							
Pullman†.....	56	23	37.2	3.24	3.0	Waupaca†.....	39	-10	20.3	0.75	14.5							
Rosalia†.....	55	18	37.0	1.96	4.8	West Bend.....	45	-16	17.8	2.09	18.5							
Sedro-Woolley* <sup>10</sup> .....	69	29	45.1	6.18		Westfield†.....	46	-2	25.8	1.62	16.2							
Shoalwater Bay* <sup>10</sup> .....	55	34	45.2			White Mound†.....	42	-10	21.1	1.20	10.0							
Suquamish†.....	65	32	45.0	7.70	1.5	Wyoming.....	45	-12	22.1	1.90	14.0							
Southbend.....	60	32	44.6	16.57	T.	Big Horn Ranch.....	53	-4	29.3	0.18	3.0							
Stillaguamish.....	67	26	42.6	7.14	0.5	Carbon.....	52	2	27.8	0.02	0.2							
Sunnyside†.....	69	23	41.4	0.14	T.	Embar.....	57	-3	30.0	0.10	1.0							
Union City†.....	58	30	43.0	16.30	2.0	Fort Laramie†.....	62	-3	32.4	0.26	0.5							
Vashon†.....	61	31	44.3	8.35	6.0	Fort Washakie.....	59	-1	29.6	0.00								
Waterville†.....	55	9	32.0	1.43	6.0	Fort Yellowstone†.....	45	-1	25.2	1.21	12.1							
West Virginia.....						Green River.....	65	-11	31.6	0.00								
Beverly†.....	64	-12	30.4	2.87	7.0	Laramie.....	49	-2	25.6	0.01								
Bluefield†.....	67	-4	34.4	0.98	2.9	Lovell.....	59	-5	29.4	0.12	2.2							
Buckhannon a†.....				2.68	9.5	Lusk†.....	59	-6	29.2	0.46	3.0							
Buckhannon b.....	66	-10	32.5	.....		Otto.....	60	0	29.0	T.	T.							
Burlington†.....	73	2	32.3	1.45	1.5	Sheridan.....	57	1	27.5	1.05	16.5							
Charleston†.....				1.93	2.0	Sundance.....	45	-6	27.2	0.85	7.0							
Dayton†.....	67	-9	31.6	1.92	3.0	Wamsutter.....	40	-8	22.8	0.00								
Eastbank.....	72	-2	36.5	1.76	4.0	Wheatland.....	63	1	36.4	T.	T.							
Elkhorn†.....	72	-6	35.2	1.16	5.8	Mexico.....												
Fairmont†.....				2.10	8.0	Ciudad P. Diaz.....	84	42	61.9	0.40								
Glenville†.....	68	-8	32.0	2.82	12.6	Leon de Aldamas.....	77	38	57.5	0.67								
Grafton†.....	71	-3	32.2	2.45	8.9													
Green Sulphur.....	65	-1	32.4	0														

## **EXPLANATION OF SIGNS.**

\* Extremes of temperature from observed readings of  
dry thermometer.

<sup>†</sup> Weather Bureau instruments.  
A numeral following the name

A numeral following the name of a station indicates the hours of observation from which the mean temperature was obtained, thus:

<sup>1</sup> Mean of 7 a. m. + 2 p. m. + 9 p. m. + 9 p. m. ÷ 4.

<sup>2</sup> Mean of 8 a. m. + 8 p. m.  $\div$  2.

<sup>3</sup> Mean of 7 a. m. + 7 p. m.

<sup>5</sup> Mean of 7 a. m. + 2 p. m.  $\div$  2.

<sup>6</sup> Mean of readings at vari-

aily mean by special tables.

<sup>7</sup> Mean from hourly reading  
<sup>8</sup> Mean of 5 a.m. to 2 p.m.

<sup>8</sup> Mean of 7 a. m. + 2 p. m. + 9 p.  
<sup>9</sup> Mean of sunrise and noon.

<sup>9</sup> Mean of sunrise and noon  
<sup>10</sup> Mean of sunrise, noon, s.

The absence of a numeral indicates

The absence of a limit temperature has been obtained

the maximum and minimum thermal stresses, italic letter following the

An italic letter following Livingston a" "Livingston

more observers, as the case may

more observers, as the case the same station. A small number

the same station. It shall contain the name of a station, or in figure or

number of days missing from

" " denotes 14 days missing.

CORRECTION

Tennessee Nunnally Receiving

Tennessee, Nuttall, Dec  
ation read 4.33 instead of 4

ation year 9.05 instead of 4.91.

## CORRECTIONS

Tennessee, Nunnelly, December, 1897, make precipitation read 4.33 instead of 4.31.

TABLE III.—Data furnished by the Canadian Meteorological Service, February, 1898.

Stations.	Pressure.		Temperature.			Precipitation.			Stations.	Pressure.		Temperature.			Precipitation.				
	Mean not reduced.	Mean reduced.	Departure from normal.	Mean.	Departure from normal.	Mean max.	Mean min.	Total.		Mean not reduced.	Departure from normal.	Mean max.	Mean min.	Total.	Departure from normal.	Depth of snow.			
	In.	In.	In.	In.	In.	In.	In.	In.		In.	In.	In.	In.	In.	In.	In.			
St. Johns, N. F.....	Ins.	29.04	30.09	+1.17	25.8	+6.8	33.1	18.5	2.80	-1.39	31.0	23.1	19.4	29.8	3.08	+0.64	27.8		
Sydney, C. B. I.....	30.08	30.19	-1.17	25.8	+6.8	35.7	22.7	4.47	-0.23	20.3	29.32	30.07	-0.03	19.4	3.20	+0.80	26.8		
Halifax, N. S.....	29.09	30.13	-1.15	29.2	+6.8	34.7	24.1	5.11	+1.55	31.8	29.34	30.09	-0.00	10.6	4.2	23.3	-0.87	4.6	
Grand Manan, N. B.....	30.01	30.06	-0.08	29.4	+6.0	30.5	17.7	0.88	-2.91	13.3	29.23	30.13	-0.03	5.0	6.6	17.4	-0.10	10.7	
Yarmouth, N. S.....	30.00	30.08	-0.04	29.6	+3.8	35.1	24.1	2.91	-2.82	6.6	28.18	30.04	-0.01	5.6	8.8	17.4	-0.73	2.5	
Charlottet'nt, P. E. I.....	30.05	30.10	-1.18	24.1	+6.5	30.5	17.7	0.88	-2.82	23.9	27.69	30.13	-0.01	4.7	5.3	15.1	-0.27	4.0	
Chattham, N. B.....	30.07	30.09	+1.11	18.7	+6.2	28.4	8.9	2.49	-0.82	23.9	27.64	30.07	-0.07	16.0	4.8	28.8	-0.63	10.7	
Father Point, Que.....	30.08	30.11	+1.11	14.0	+2.5	22.9	5.0	3.26	+1.64	27.0	27.36	30.11	-0.03	12.3	4.3	22.6	-0.06	8.2	
Quebec, Que.....	29.74	30.09	-0.05	18.7	+6.9	25.1	12.4	5.12	+1.73	44.2	26.29	30.02	-0.07	1.0	25.1	3.8	0.90	+0.14	9.0
Montreal, Que.....	29.85	30.07	-0.02	19.9	+5.4	26.0	13.8	5.65	+2.83	46.3	25.19	30.07	-0.01	19.3	4.0	29.4	-0.27	24.7	
Rockliffe, Ont.....	29.55	30.09	-0.03	16.4	+6.8	26.4	6.5	1.66	-0.66	5.8	27.60	30.07	-0.02	7.3	-1.0	1.0	-0.28	12.2	
Ottawa, Ont.....	29.74	30.12	.....	19.0	+7.3	26.8	11.1	4.33	.....	34.3	28.49	30.14	0.05	3.5	11.6	-10.6	1.86	18.6	
Kingston, Ont.....	29.74	30.08	.00	22.7	+4.9	30.2	15.1	1.49	-0.95	9.8	28.26	30.16	0.0	-0.1	9.5	-9.6	1.58	15.8	
Toronto, Ont.....	29.69	30.10	+0.01	24.8	+3.3	32.0	17.6	3.06	+0.75	24.5	29.86	29.89	-0.03	4.6	5.5	88.8	5.20	1.5	
White River, Ont.....	28.68	30.14	+0.06	5.9	+5.7	20.3	-8.5	2.02	+0.80	19.8	28.15	30.08	-0.03	6.2	2.3	49.5	88.8	5.20	
Port Stanley, Ont.....	29.40	30.07	-0.02	25.1	+2.3	31.1	19.0	4.35	+1.43	33.0	29.93	30.08	-0.03	6.2	0.7	66.8	57.7	4.61	

TABLE IV.—Mean temperature for each hour of seventy-fifth meridian time, February, 1898.

Stations.	1 a. m.	2 a. m.	3 a. m.	4 a. m.	5 a. m.	6 a. m.	7 a. m.	8 a. m.	9 a. m.	10 a. m.	11 a. m.	Noon.	1 p. m.	2 p. m.	3 p. m.	4 p. m.	5 p. m.	6 p. m.	7 p. m.	8 p. m.	9 p. m.	10 p. m.	Midnight.	Mean.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.									
	12.3	11.3	10.8	9.6	9.2	8.5	8.3	8.4	7.7	8.8	11.8	15.9	19.4	22.1	25.6	28.3	25.9	28.0	30.9	32.6	32.1	31.5	31.0	32.5
Bismarck, N. Dak.....	12.3	10.6	9.3	8.5	8.2	7.7	8.3	8.4	7.7	8.8	11.8	15.9	19.4	22.1	25.6	28.3	25.9	28.0	30.9	32.6	32.1	31.5	31.0	32.5
Boston, Mass.....	30.9	30.6	30.3	29.9	28.9	28.4	29.5	29.5	30.4	31.9	33.8	35.3	36.2	37.2	36.6	35.6	34.8	33.9	33.1	32.6	32.2	31.5	31.0	32.5
Buffalo, N. Y.....	26.7	26.6	26.5	26.2	25.6	25.0	25.1	25.6	25.7	26.2	27.1	28.1	28.9	29.4	30.0	30.2	29.4	28.9	27.5	27.4	27.2	27.0	27.5	27.3
Chicago, Ill.....	26.4	26.1	25.6	25.2	25.2	25.2	25.4	24.9	25.0	24.9	25.1	27.1	28.2	29.0	29.4	30.0	29.8	29.3	28.8	29.5	29.1	28.1	27.7	27.3
Cincinnati, Ohio.....	33.4	32.7	32.0	31.6	31.4	30.9	31.0	30.8	30.8	31.3	32.5	33.9	35.4	36.8	37.9	38.8	38.8	38.5	37.6	36.9	36.2	34.9	34.3	34.3
Cleveland, Ohio.....	27.3	26.9	26.4	24.1	24.1	23.9	23.8	24.1	24.5	25.4	26.5	27.8	28.7	29.8	30.9	30.9	30.9	30.3	29.9	29.5	28.8	28.2	28.1	28.1
Detroit, Mich.....	25.0	24.6	24.2	24.1	24.1	23.9	23.8	24.1	24.5	25.4	26.3	27.2	27.8	28.6	29.2	29.5	29.6	29.2	28.3	28.1	27.0	26.7	26.4	26.4
Dodge City, Kans.....	33.2	32.3	31.0	29.8	28.6	28.2	27.1	27.1	26.7	26.6	29.6	34.7	39.1	42.3	45.0	47.1	48.8	49.8	49.3	47.2	42.4	41.1	38.1	37.1
Eastport, Me.....	27.1	27.0	26.5	26.1	25.9	25.6	25.5	25.4	26.0	26.8	27.9	29.5	30.2	30.5	30.6	30.3	30.9	29.5	29.2	28.8	28.4	28.0	27.6	28.0
Galveston, Tex.....	58.0	57.6	57.2	56.8	56.2	56.1	55.6	55.9	56.0	56.6	58.0	59.6	60.7	61.6	61.8	61.8	61.0	60.4	59.8	59.5	59.2	58.8	58.6	58.7
Havre, Mont.....	20.1	19.6	18.9	18.1	17.7	16.7	16.3	15.7	14.3	14.7	16.0	18.2	20.9	24.4	25.9	27.4	28.8	29.2	28.3	28.8	28.4	28.0	27.6	27.3
Kansas City, Mo.....	33.0	32.4	31.7	31.0	30.5	30.0	29.7	29.6	29.8	30.8	32.3	34.9	36.8	38.5	40.2	41.3	41.8	41.8	40.6	38.9	37.7	36.8	35.7	35.0
Key West, Fla.....	67.4	66.9	66.6	66.4	66.4	66.4	66.6	66.6	67.9	68.9	69.7	70.4	70.9	70.9	70.9	70.4	69.8	69.2	68.8	68.6	68.3	68.1	67.8	68.4
Memphis, Tenn.....	43.8	43.1	42.4	41.8	41.1	40.7	40.3	40.2	40.0	41.1	42.9	45.1	46.9	48.4	49.7	50.6	51.3	51.1	49.6	48.2	47.3	46.5	44.8	45.1
New Orleans, La.....	54.3	53.8	53.2	52.6	51.7	50.8	50.6	50.9	53.3	56.3	58.2	60.0	61.4	61.8	62.5	63.0	62.0	60.6	58.5	57.3	56.3	55.5	55.3	56.3
New York, N. Y.....	31.2	30.6	30.0	29.4	29.2	29.0	29.2	30.0	31.2	32.8	34.6	35.8	36.1	36.5	36.9	36.0	35.0	34.4	34.0	33.1	32.7	32.1	31.6	32.5
Philadelphia, Pa.....	32.9	32.3	31.6	31.1	30.8	30.4	30.1	31.0	32.4	33.7	35.7	37.6	39.4	40.5	41.8	41.5	40.8	39.7	38.5	37.4	38.3	38.3	35.1	35.1
Pittsburg, Pa.....	29.9	29.3	28.9	28.3	28.1	28.2	28.2	28.7	29.1	30.5	31.9	33.5	35.1	35.9	37.0	36.6	35.9	34.9	33.1	32.4	31.4	30.6	32.0	32.0
Portland, Oreg.....	45.2	44.9	44.8	44.4	44.1	44.7	45.4	45.4	46.4	46.9	47.4	47.7	48.0	48.3	48.6	48.8	48.8	48.0	47.6	47.1	46.5	45.9	45.6	45.6
Portland, Oreg.....	45.2	44.9	44.8	44.4	44.1	44.7	45.4	45.4	46.4	46.9	47.4	47.7	48.0	48.3	48.6	48.8	48.8	48.0	47.6	47.1	46.5	45.9	45.6	45.6
St. Louis, Mo.....	36.1	35.4	34.1	32.8	32.2	32.3	32.4	32.5	32.1	32.1	32.5	33.1	33.1	33.1	33.1	33.1	33.1	33.1	32.5	32.5	32.5	32.5	32.5	32.5
St. Paul, Minn.....	19.8	19.1	18.3	17.9	17.2	16.7	16.3	16.0	15.5	15.8	17.5	19.5	21.4	22.6	24.1	25.2	26.0	25.7	24.3	23.4	23.4	22.1	21.8	20.6
Salt Lake City, Utah.....	32.9	32.2	31.1	30.4	30.6	30.3	30.1	29.5	30.2	32.3	35.2	38.0	39.4	40.7	40.9	41.5	41.4	40.5	39.2	37.5	36.0	35.4	34.6	35.3
San Diego, Cal.....	52.7	52.3	51.8	51.3	50.8	50.4	50.3	50.6	50.1	49.5	50.8	54.7	57.0	58.8	59.9	60.3	59.9	59.4	58.5	56.6	55.5	54.7	53.8	54.5
San Francisco, Cal.....	51.9	51.4	50.8	50.6	50.1	49.6	49.8	48.3	48.4	48.2	48.3	49.5	50.5	51.8	53.1	54.8	56.0	55.2	54.1	53.0	52.4	51.8	50.6	50.6
Savannah, Ga.....	47.1	46.1	45.0	44.4	43.9	43.3	43.0	43.2	45.8	49.8	53.6	55.5	58.2	59.2	60.2	61.5	62.1	61.1	59.6	58.3	57.1	56.1	55.1	54.1
Washington, D. C.....	31.2	30.3	29.5	29.1	28.5	28.1	28.0	28.8	31.0	33.6	36.5	38.3	40.0	41.6	42.5	43.3	41.5	37.9	36.4	35.0	33.9	33.0	32.2	34.6

TABLE VI.—Average wind movement for each hour of seventy-fifth meridian time, February, 1898.

Stations.	1 a. m.	2 a. m.	3 a. m.	4 a. m.	5 a. m.	6 a. m.	7 a. m.	8 a. m.	9 a. m.	10 a. m.	11 a. m.	Noon.	1 p. m.	2 p. m.	3 p. m.	4 p. m.	5 p. m.	6 p. m.	7 p. m.	8 p. m.	9 p. m.	10 p. m.	11 p. m.	Midnight.	Mean.
Abilene, Tex.	8.0	8.0	7.5	7.4	7.8	8.5	9.4	9.2	8.9	9.7	11.2	12.6	13.7	12.4	12.9	12.6	11.6	11.0	8.7	7.1	8.0	8.2	8.1	9.8	
Albany, N. Y.	6.5	6.7	7.2	6.9	7.5	7.9	7.8	8.0	8.8	9.2	9.8	9.9	11.4	10.4	10.3	10.1	9.5	8.5	7.8	8.3	7.5	6.6	6.4	6.0	8.3
Alpena, Mich.	9.1	9.0	8.9	9.5	9.8	9.7	9.4	10.0	10.6	12.1	13.1	13.8	13.1	12.9	12.2	12.9	12.5	11.5	11.2	10.0	9.8	9.4	9.2	8.9	10.7
Amarillo, Tex.	16.0	16.9	18.8	15.4	16.1	16.8	16.1	15.8	15.1	15.4	16.9	18.5	19.3	19.6	19.6	19.0	18.6	18.2	15.6	12.7	13.1	14.5	16.8	15.9	16.6
Atlanta, Ga.	10.1	10.3	9.5	9.4	9.7	9.1	8.9	8.9	9.0	10.0	10.9	11.1	11.4	11.3	11.6	12.0	11.7	11.0	9.5	10.0	10.7	10.1	10.0	9.7	10.2
Atlantic City, N. J.	10.3	10.6	11.0	11.3	11.8	11.2	11.1	12.1	12.9	13.1	12.0	12.3	12.2	11.9	11.4	11.3	9.5	8.8	9.2	9.4	8.9	9.4	9.5	10.9	10.9
Augusta, Ga.	5.3	4.7	4.6	4.5	4.5	4.6	5.0	4.7	5.0	5.7	6.6	8.0	9.0	9.2	9.3	9.9	9.0	8.7	7.5	6.8	6.5	5.6	5.4	6.5	6.5
Baker City, Oreg.	5.0	5.9	6.1	5.8	5.9	6.0	4.9	4.7	5.0	5.0	5.9	5.8	5.5	6.9	8.6	8.7	8.6	9.2	8.3	6.6	6.6	5.7	5.8	6.3	6.3
Baltimore, Md.	5.0	4.8	4.8	4.6	4.3	4.6	5.0	4.9	5.8	6.2	6.4	6.3	7.1	6.9	6.6	6.4	5.6	5.0	5.0	4.5	4.7	4.6	5.5	5.7	5.5
Bismarck, N. Dak.	10.8	10.2	9.4	9.1	9.1	8.5	8.7	8.8	9.7	9.2	9.4	10.4	11.6	12.2	12.7	13.0	13.3	11.6	11.1	11.3	11.5	11.4	11.4	11.4	10.7
Block Island, R. I.	15.4	15.7	15.2	15.9	15.7	13.9	13.5	13.5	13.9	14.8	15.5	15.5	15.9	15.9	15.6	15.4	15.4	14.1	14.3	15.2	14.2	14.5	14.6	14.0	14.9
Boston, Mass.	10.3	11.4	11.3	11.1	11.1	11.3	11.5	11.2	11.9	11.6	12.0	13.2	12.9	13.6	12.9	13.0	11.6	11.9	11.2	10.8	10.5	9.8	9.3	11.5	
Buffalo, N. Y.	15.0	14.4	14.6	14.9	14.5	14.2	14.8	15.5	15.9	16.6	16.4	16.9	17.0	16.9	16.6	16.5	15.6	15.9	15.8	13.8	14.0	13.6	15.4	15.4	
Cairo, Ill.	8.6	8.9	9.1	9.1	9.2	9.2	8.7	8.9	9.1	10.7	11.9	12.3	12.5	12.3	12.0	12.0	11.3	10.8	9.4	8.8	8.5	8.4	8.1	9.9	
Cape Henry, Va.	12.6	12.8	12.3	12.2	13.0	13.2	12.6	12.9	13.2	12.9	12.9	13.2	12.6	12.8	11.1	10.4	9.7	9.5	9.6	10.8	11.5	13.1	12.5	12.0	
Carson City, Nev.	6.7	7.0	5.6	4.8	4.9	4.9	4.9	6.0	6.0	6.0	6.0	6.0	6.1	5.5	6.1	7.5	8.8	8.7	7.8	9.0	8.2	8.1	6.8	6.3	6.6
Charleston, S. C.	9.8	9.4	9.6	9.7	9.5	9.5	10.2	9.7	10.4	10.1	10.1	10.2	11.3	12.0	12.4	13.1	12.9	10.6	9.2	8.2	7.8	8.4	8.7	8.9	10.1
Charlotte, N. C.	5.2	5.2	5.7	5.3	4.9	5.1	4.5	5.1	5.8	6.8	7.1	7.3	8.0	8.7	8.6	9.2	7.3	6.1	5.9	5.8	5.6	5.5	6.4	6.4	
Chattanooga, Tenn.	7.2	7.2	6.2	6.1	6.3	6.1	5.8	6.0	6.4	7.2	7.5	8.9	9.5	9.9	10.4	10.1	9.1	7.7	7.4	7.2	7.0	7.8	7.4	7.5	
Cheyenne, Wyo.	9.9	10.1	10.8	11.2	11.0	11.4	10.7	11.4	11.5	11.1	13.1	16.6	18.2	17.2	16.9	16.8	16.0	13.8	11.7	9.4	9.4	10.4	12.7	12.0	
Chicago, Ill.	18.9	18.6	18.9	18.9	18.4	18.7	19.4	19.5	19.6	19.6	20.0	20.2	21.1	19.9	20.6	21.0	20.5	19.3	19.0	19.1	19.0	18.6	18.5	18.3	19.4
Cincinnati, Ohio.	8.4	8.4	8.2	8.2	8.1	8.5	8.2	8.2	9.4	10.2	10.8	10.7	11.7	11.2	11.1	10.8	10.7	9.4	8.7	7.9	8.0	7.6	7.5	7.4	9.1
Cleveland, Ohio.	16.5	15.9	15.1	15.2	15.4	15.2	15.0	16.0	16.2	16.3	15.8	16.3	17.0	17.0	17.5	17.5	17.3	17.3	17.0	16.3	15.9	16.0	15.5	16.8	
Columbia, Mo.	10.2	10.6	10.1	10.7	10.6	11.2	11.0	11.1	10.5	11.8	11.9	11.5	12.6	13.1	13.5	13.2	12.6	12.1	11.0	9.8	8.8	9.4	9.8	9.7	10.1
Columbus, Ohio.	7.6	7.6	7.6	7.5	7.8	7.4	7.5	7.5	8.1	9.0	9.5	9.8	9.9	10.6	11.0	10.3	9.5	8.9	8.7	8.5	8.1	7.9	7.6	8.6	
Concordia, Kans.	6.4	6.5	5.9	6.6	6.7	5.8	5.9	5.8	5.8	6.9	7.5	8.1	8.3	8.2	8.5	8.9	8.9	8.1	6.6	5.8	5.8	6.5	6.6	6.5	6.9
Corpus Christi, Tex.	9.6	10.0	9.2	10.0	9.8	9.0	9.4	9.6	9.4	9.4	10.8	11.4	12.0	12.0	13.2	14.1	14.7	14.8	14.3	13.4	12.0	11.2	10.2	9.6	11.3
Davenport, Iowa.	7.6	7.5	7.4	7.4	7.1	7.6	8.0	8.0	8.9	9.5	9.8	10.3	10.9	11.2	11.1	10.8	10.3	9.5	8.5	7.5	7.1	7.8	7.5	8.6	
Denver, Colo.	7.5	6.9	7.2	8.2	8.1	7.8	7.2	7.1	6.7	7.2	7.7	8.8	8.0	8.2	8.4	8.1	8.1	8.2	7.5	8.0	7.7	7.2	8.2	7.6	
Des Moines, Iowa.	8.4	8.8	8.5	8.7	8.5	8.1	8.5	8.4	8.8	9.7	10.2	10.0	10.9	10.5	10.7	10.2	10.9	9.9	8.4	8.4	8.8	8.6	8.5	9.3	
Detroit, Mich.	10.8	10.8	10.3	10.6	10.2	10.4	10.0	10.4	10.7	10.9	12.3	12.6	13.0	12.9	12.6	12.4	11.4	11.2	9.8	9.2	9.8	10.1	10.1	10.5	11.0
Dodge City, Kans.	8.6	8.5	8.4	7.2	8.2	8.3	8.0	7.9	8.4	9.4	11.0	11.5	11.6	12.7	13.0	12.9	11.7	11.8	9.9	8.2	7.9	8.4	8.6	8.8	9.6
Dubuque, Iowa.	8.0	8.0	8.2	8.7	8.5	8.4	8.0	7.9	8.0	9.6	9.1	9.2	9.9	9.5	10.0	10.0	9.6	8.7	8.3	7.3	7.0	6.8	7.1	7.6	8.5
Duluth, Minn.	9.8	10.9	10.0	9.8	10.2	10.9	10.8	11.1	10.9	11.2	11.6	11.4	11.1	11.2	11.6	11.5	11.4	11.0	10.9	9.7	10.1	11.1	9.6	10.6	
Eastport, Me.	15.1	15.2	15.4	15.6	15.0	15.1	15.5	16.2	16.2	16.5	16.5	14.7	14.0	14.1	13.8	13.6	13.1	12.2	12.0	12.1	12.6	12.9	14.5		
El Paso, Tex.	9.3	8.9	8.8	7.7	8.5	8.9	9.0	8.1	8.4	9.3	9.6	10.4	12.0	11.7	12.1	12.8	12.9	13.2	13.1	11.0	9.0	9.0	9.5	9.6	10.1
Erie, Pa.	12.6	11.5	11.9	12.0	11.1	11.5	10.9	11.3	11.8	11.5	11.3	12.2	12.5	12.9	12.1	11.6	11.6	11.8	11.0	12.1	12.7	12.3	12.4	11.9	
Eureka, Cal.	6.3	6.1	5.7	6.0	6.5	6.4	7.1	7.6	8.0	8.9	9.5	9.8	10.3	10.9	11.2	10.8	10.3	9.5	8.5	7.5	7.3	7.1	6.6	6.7	
Fort Canby, Wash.	21.0	22.5	21.3	22.0	24.8	24.2	25.0	24.8	22.4	21.3	20.9	21.9	22.5	23.1	23.6	22.9	23.8	23.4	22.3	21.4	21.6	20.9	21.7	22.5	
Fort Smith, Ark.	6.2	6.4	6.2	6.4	7.2	6.9	7.3	6.7	8.5	8.2	8.9	9.4	10.0	9.7	9.9	10.0	9.7	8.9	7.6	7.1	7.0	6.2	6.7	5.9	7.6
Fresno, Cal.	4.5	4.2	4.6	4.1	4.2	4.5	4.1	4.4	4.4	4.3	4.2	4.6	5.4	6.2	6.8	6.5	6.1	6.1	6.0	4.4	3.9	3.5	4.1	4.9	
Galveston, Tex.	10.2	10.4	10.6	9.8	10.3	10.5	10.9	10.4	10.2	11.4	11.9	11.7	11.9	11.4	11.4	11.4	11.0	10.8	10.4	10.6	10.9	10.5	10.7		
Grand Haven, Mich.	11.7	11.1	11.1	11.2	12.0	11.6	11.9	11.3	11.6	11.8	12.8	13.0	13.4	12.4	12.1	12.0	11.0	10.8	11.0	11.1	11.2	11.6	11.0	11.7	
Greenbay, Wis.	9.0	9.6	9.6	10.0	10.2	10.1	9.6	9.4	10.1	10.1	9.6	10.5	10.2	10.2	10.2	10.9	9.9	8.7	8.6	8.9	9.0	9.0	9.5	9.5	
Hannibal, Mo.	9.9	10.4	10.3	10.6	10.8	11.0	10.9	10.2	10.1	11.5	12.6	13.4	13.4	13.0	13.2	13.4	13.2	13.8	13.0	12.2	12.1	12.6	13.0		
Harrisburg, Pa.	8.9	8.6	9.0	8.4	8.0	7.9	7.6	8.4	9.2	9.5	9.5	10.0	11.1	9.7	9.6	8.9	8.4	8.7	8.4	7.5	7.4	7.9	8.8		
Hatteras, N. C.	15.5	18.6	16.0	16.2	15.8	15.3	14.9	14.0	13.5	13.7	13.5	13.4	13.4	14.4	15.0	15.2	13.9	13.1	14.4	14.6	14.4	14.7	14.9	14.9	
Havre, Mont.	10.0	9.8	9.6	10.6	10.9	10.3	9.8	10.0	9.7	9.6	9.8	10.4	11.6	11.1	11.6	12.2	12.4</td								

TABLE VI.—Average wind movement, etc.—Continued.

Stations.	Average wind movement, etc.												Continued.												
	1 a. m.	2 a. m.	3 a. m.	4 a. m.	5 a. m.	6 a. m.	7 a. m.	8 a. m.	9 a. m.	10 a. m.	Noon.	1 p. m.	2 p. m.	3 p. m.	4 p. m.	5 p. m.	6 p. m.	7 p. m.	8 p. m.	9 p. m.	10 p. m.	11 p. m.	Midnight.	Mean.	
Pensacola, Fla. ....	8.0	7.4	7.1	7.4	7.2	7.5	7.7	8.1	8.0	9.4	10.7	10.6	10.9	12.1	11.4	10.5	8.9	7.6	7.2	7.6	7.8	8.1	9.0		
Philadelphia, Pa. ....	9.9	10.2	9.8	9.5	9.3	9.4	10.3	10.6	11.3	11.3	10.5	10.9	11.5	11.4	11.1	10.5	10.4	10.5	10.4	10.5	10.2	9.9	10.3		
Phoenix, Ariz. ....	2.0	2.8	3.0	2.8	2.9	3.0	3.4	3.6	3.4	3.3	3.5	4.2	4.5	4.1	4.4	4.4	4.4	3.4	2.5	2.3	2.2	2.2	3.3		
Pierre, S. Dak. ....	9.0	8.5	8.6	7.9	8.4	8.0	8.2	7.8	8.0	7.1	9.1	9.9	10.3	10.2	11.6	11.8	12.0	11.5	10.3	10.1	8.6	8.5	8.9		
Pittsburg, Pa. ....	6.7	5.9	6.2	6.2	5.8	6.7	6.1	6.8	6.8	7.8	8.6	8.5	8.6	8.5	8.2	8.0	7.4	6.9	7.2	7.2	7.2	6.8	7.2		
Port Angeles, Wash. ....	5.8	5.6	5.5	5.8	5.5	5.5	4.7	4.8	4.9	5.2	5.6	5.0	4.6	5.4	5.6	6.1	6.5	6.2	5.3	5.0	5.1	5.9	5.4	5.4	
Port Huron, Mich. ....	13.0	13.0	12.4	12.0	12.0	12.1	11.8	11.9	12.3	13.3	14.2	14.3	15.1	15.0	16.0	15.4	14.6	13.5	12.7	12.1	12.0	12.1	11.9	13.1	
Portland, Me. ....	8.9	8.4	7.9	7.9	7.8	8.2	8.3	7.8	7.6	8.0	8.1	8.3	8.8	9.1	8.5	8.2	8.0	8.2	8.4	8.1	8.0	8.2	8.3		
Portland, Oreg. ....	9.9	9.8	9.6	9.5	9.3	8.9	9.2	10.2	10.4	12.0	11.4	11.1	11.8	12.0	12.8	13.0	12.9	11.5	10.8	9.7	9.6	10.3	10.8		
Pueblo, Colo. ....	7.0	6.9	6.5	6.3	6.9	7.0	7.5	7.0	6.5	6.6	7.4	8.0	9.0	9.3	9.8	9.6	9.6	7.2	6.2	5.5	5.7	5.7	7.4		
Raleigh, N. C. ....	4.7	4.5	4.3	4.0	4.2	4.1	4.4	4.3	4.6	5.7	6.1	6.2	7.4	7.1	7.2	6.9	6.5	5.6	4.8	5.3	4.9	4.8	4.3	4.6	5.3
Rapid City, S. Dak. ....	9.8	8.9	7.8	7.5	7.4	7.1	6.9	6.0	6.0	6.9	7.3	8.0	10.6	11.9	13.1	13.5	13.3	12.5	11.0	10.4	8.5	7.9	7.6	8.6	9.1
Redbluff, Cal. ....	5.5	5.5	5.2	5.6	5.7	5.5	5.3	5.4	5.9	6.0	6.5	6.3	6.9	7.4	7.7	8.2	8.6	8.5	8.2	7.4	5.9	6.0	5.6	6.4	
Richmond, Va. ....	4.6	4.4	4.0	4.2	4.2	4.6	4.6	5.2	5.9	6.6	6.9	7.1	7.8	7.2	7.0	6.5	6.0	5.5	5.2	5.6	5.1	4.8	4.8	5.5	
Rochester, N. Y. ....	7.6	7.5	7.6	7.4	7.5	7.7	7.6	7.9	8.8	9.4	9.5	10.0	9.5	8.4	8.2	8.4	8.7	8.5	8.0	7.6	8.1	8.0	7.6	8.3	
Roseburg, Oreg. ....	2.7	2.4	2.8	2.1	2.8	3.0	2.4	2.4	2.9	3.3	2.9	2.9	3.2	4.0	5.2	5.4	5.6	5.2	5.0	4.4	4.1	3.4	2.9	2.4	3.5
Sacramento, Cal. ....	6.9	7.1	7.9	8.0	7.5	6.9	7.5	8.2	7.6	7.2	6.8	7.9	8.4	9.1	9.5	9.8	9.7	9.4	7.8	6.9	7.2	7.3	7.1	7.9	
St. Louis, Mo. ....	10.6	10.8	11.0	10.9	10.9	11.0	11.5	12.7	12.5	12.7	13.2	13.2	13.9	13.7	13.9	13.8	12.8	10.9	11.0	11.3	10.4	9.9	9.4	11.8	
St. Paul, Minn. ....	7.6	8.2	7.6	7.3	7.4	6.9	6.9	7.4	7.4	8.0	8.2	9.0	9.1	9.6	10.0	9.6	9.4	8.0	7.4	7.5	7.8	7.7	8.1		
Salt Lake City, Utah. ....	4.1	4.4	3.9	3.9	3.9	3.6	3.3	3.5	4.2	4.4	4.8	5.1	5.8	6.5	7.7	8.0	8.1	7.9	7.1	6.0	4.8	4.3	4.2	5.1	
San Antonio, Tex. ....	8.4	8.3	8.0	7.0	6.3	7.1	7.9	7.5	7.7	8.0	9.6	10.1	10.6	10.3	10.5	10.1	10.5	10.6	9.0	9.2	9.5	8.9	7.9	8.9	
San Diego, Cal. ....	3.0	3.1	2.7	3.9	3.8	3.6	3.3	3.8	3.8	3.7	3.6	3.5	4.9	6.6	8.7	10.2	11.5	11.7	11.0	8.5	6.9	4.6	3.9	3.1	5.6
Sandusky, Ohio. ....	9.6	8.6	8.6	8.6	8.2	8.2	8.3	8.5	8.6	9.8	10.4	11.3	12.0	11.6	11.7	11.9	10.7	10.0	9.5	9.3	8.8	8.5	9.1	9.6	
San Francisco, Cal. ....	7.6	7.6	6.8	6.9	7.0	6.6	6.8	7.6	7.2	6.9	6.8	7.3	8.1	8.6	10.2	11.8	12.5	13.0	11.4	9.9	8.4	7.1	8.3		
San Luis Obispo, Cal. ....	3.9	3.9	3.8	4.1	4.2	3.6	3.7	4.0	5.0	4.5	5.0	6.0	7.9	8.6	9.1	9.7	9.6	8.2	6.5	5.1	4.5	4.0	5.8		
Santa Fe, N. Mex. ....	3.8	3.7	4.2	4.3	4.2	4.1	3.8	3.5	3.7	3.4	5.2	7.4	8.5	8.2	8.8	8.4	8.5	8.1	5.3	3.4	3.0	3.9	3.8	5.4	
Sault Ste Marie, Mich. ....	8.1	8.5	8.2	8.5	8.4	8.8	9.0	8.5	9.1	9.8	10.3	10.8	11.5	12.3	12.6	12.2	11.5	11.7	11.0	8.5	8.4	8.6	7.5	7.9	
Savannah, Ga. ....	8.2	8.2	8.7	8.0	7.8	7.6	7.9	7.6	7.9	8.5	9.0	9.6	10.7	10.4	11.1	10.6	9.9	8.7	7.9	7.3	7.6	7.3	9.5		
Seattle, Wash. ....	8.2	7.8	8.2	7.9	7.1	6.8	6.7	6.2	6.7	7.0	7.4	7.2	8.0	8.5	9.0	9.1	9.3	8.8	8.9	9.0	7.9	7.7	7.9		
Shreveport, La. ....	7.1	6.4	6.5	6.9	6.6	5.9	5.6	5.9	6.0	7.4	8.1	8.4	8.2	8.3	9.1	9.0	9.1	8.5	7.8	6.1	6.3	6.8	7.1	7.3	
Sioux City, Iowa. ....	12.1	12.3	13.0	13.3	12.6	12.8	14.3	14.7	14.2	14.0	15.0	15.4	16.7	16.6	16.3	16.4	15.8	14.5	13.4	13.2	13.0	12.2	11.7	14.2	
Spokane, Wash. ....	8.2	8.0	7.6	7.4	7.2	7.5	6.7	7.2	7.0	7.4	8.4	8.4	8.9	9.4	10.1	10.8	10.3	10.0	9.2	8.3	8.4	7.8	8.1	8.3	
Springfield, Ill. ....	10.9	11.0	11.0	10.8	10.9	11.0	11.5	11.1	11.8	12.6	13.4	13.6	13.8	14.1	13.8	13.6	13.2	12.6	11.3	10.9	10.9	10.5	11.9		
Springfield, Mo. ....	12.2	11.9	12.3	12.2	12.0	12.8	12.1	12.6	13.4	13.5	13.5	14.4	14.5	14.5	14.8	14.3	13.6	11.4	9.9	10.4	11.4	11.4	12.0	12.7	
Tacoma, Wash. ....	7.5	7.1	8.1	7.6	7.0	6.2	6.4	6.0	5.9	5.8	6.6	6.1	7.3	8.5	9.7	10.5	9.4	9.2	9.0	8.9	8.0	7.7	8.0	7.6	
Tampa, Fla. ....	5.8	4.9	5.0	5.4	5.4	5.2	5.6	5.5	6.1	6.9	7.7	7.9	9.0	9.1	8.8	8.8	9.6	8.5	6.9	6.2	5.7	5.9	5.6	6.7	
Tatoosh Island, Wash. ....	15.4	15.9	16.3	17.1	17.2	18.6	18.1	20.8	20.9	20.8	20.3	21.4	23.1	22.4	21.2	21.1	20.8	18.5	18.6	17.4	17.4	16.6	15.7	19.0	
Toledo, Ohio. ....	10.0	10.1	10.3	9.9	9.6	9.8	9.4	9.2	10.3	10.9	11.9	12.4	13.5	13.0	13.2	12.4	11.7	11.0	10.7	10.3	9.9	10.2	10.1	10.8	
Vicksburg, Miss. ....	8.0	7.9	6.8	6.9	6.7	6.6	7.0	7.0	7.5	7.9	8.2	8.5	8.8	8.3	8.2	7.6	6.8	6.7	6.1	6.5	7.2	7.7	7.5		
Vineyard Haven, Mass. ....	9.2	8.0	7.4	8.1	8.3	8.3	8.0	7.7	8.7	9.7	10.4	11.1	11.7	11.2	10.9	10.2	9.2	8.3	8.0	8.0	7.9	8.4	9.0		
Walla Walla, Wash. ....	7.6	7.8	7.3	6.9	7.6	7.6	8.1	7.9	8.0	8.3	8.3	9.1	10.7	10.4	10.9	9.9	9.4	8.3	7.4	8.1	7.9	7.7	8.4		
Washington, D. C. ....	8.0	7.3	6.5	6.1	5.9	5.5	6.0	7.8	8.5	7.7	8.4	8.9	9.5	9.1	9.2	8.2	7.3	6.8	7.2	7.2	6.5	7.0	7.5		
Wichita, Kans. ....	8.9	8.9	8.4	8.6	8.8	9.6	9.3	9.0	8.9	9.3	10.6	11.3	11.6	11.4	11.0	10.6	9.9	9.9	8.6	7.2	7.1	8.5	9.0	9.4	
Williston, N. Dak. ....	8.7	8.1	7.8	7.2	7.1	6.5	6.4	6.5	6.7	6.3	6.4	6.7	7.7	9.4	10.0	12.1	13.4	13.8	11.9	10.5	8.5	8.6	9.2	8.7	
Wilmington, N. C. ....	6.8	7.0	6.9	7.0	6.7	6.4	7.1	7.5	8.0	9.0	9.0	8.6	9.2	9.8	10.3	10.2	9.7	8.4	6.9	6.6	6.6	6.7	6.1	7.8	
Woods Hole, Mass. ....	13.6	13.2	12.4	13.8	15.2	14.6	13.5	13.5	13.1	13.2	13.9	14.3	14.6	14.4	13.8	12.8	12.6	13.6	14.0	13.8	13.4	13.2	13.7		
Yankton, S. Dak. ....	9.2	9.2	8.7	8.3	8.6	8.7	9.6	9.5	9.2	9.4	10.5	11.6	11.8	11.9	12.0	11.9	11.5	10.8	9.8	8.2	8.0	8.1	8.5	9.7	

TABLE VII.—Resultant winds from observations at 8 a. m. and 8 p. m., daily, during the month of February, 1898.

Stations.	Component direction from—				Resultant.		Stations.	Component direction from—				Resultant.						
	N.	S.	E.	W.	Direction from—	Duration.		N.	S.	E.	W.	Direction from—	Duration.					
<i>New England.</i>																		
Eastport, Me.	Hours.	Hours.	Hours.	Hours.	o	Hours.	Upper Lake Region—Cont'd.	Hours.	Hours.	Hours.	Hours.	o	Hours.					
Portland, Me.	21	16	15	18	n. 31 w.	6	Milwaukee, Wis.	20	18	9	22	n. 73 w.	14					
Northfield, Vt.	23	14	8	22	n. 57 w.	17	Greenbay, Wis.	20	19	6	20	n. 86 w.	14					
Boston, Mass.	23	27	4	6	s. 27 w.	4	Duluth, Minn.	26	14	11	21	n. 40 w.	16					
Nantucket, Mass.	16	19	9	25	s. 79 w.	16	Moorhead, Minn.	21	16	16	21	n. 45 w.	7					
Wood's Hole, Mass.*	18	19	8	22	s. 86 w.	14	Bismarck, N. Dak.	22	8	18	21	n. 37 w.	5					
Block Island, R. I.	18	15	10	26	n. 79 w.	16	Williston, N. Dak.	21	17	7	22	n. 75 w.	16					
New Haven, Conn.	29	12	9	16	n. 22 w.	18	<i>Upper Mississippi Valley.</i>											
<i>Middle Atlantic States.</i>																		
Albany, N. Y.	15	20	4	22	s. 74 w.	19	St. Paul, Minn.	22	18	13	19	n. 56 w.	7					
Binghamton, N. Y.†	8	7	10	8	n. 6 e.	2	La Crosse, Wis. †	12	8	4	10	n. 56 w.	7					
New York, N. Y.	18	14	14	24	n. 68 w.	11	Davenport, Iowa	16	18	10	27	s. 83 w.	17					
Harrisburg, Pa.	22	5	14	24	n. 30 w.	20	Des Moines, Iowa	24	15	11	17	n. 84 w.	11					
Philadelphia, Pa.	27	13	11	23	n. 41 w.	18	Dubuque, Iowa	27	19	8	24	s. 53 w.	20					
Atlantic City, N. J.	21	13	13	24	n. 54 w.	14	Keokuk, Iowa	17	21	12	24	s. 72 w.	13					
Cape May, N. J.	20	11	10	25	n. 59 w.	18	Calo, Ill.	20	21	12	15	s. 72 w.	3					
Baltimore, Md.	20	8	15	25	n. 49 w.	16	Springfield, Ill.	18	20	6	23	s. 83 w.	17					
Washington, D. C.	28	11	10	18	n. 25 w.	19	Hannibal, Mo. †	11	7	5	10	n. 51 w.	6					
Lynchburg, Va.	15	14	15	24	n. 84 w.	9	St. Louis, Mo.	16	20	13	20	s. 60 w.	8					
Norfolk, Va.	21	14	17	16	s. 8 e.	7	<i>Missouri Valley.</i>											
Richmond, Va.	10	9	5	9	n. 76 w.	4	Columbia, Mo.*	8	9	6	11	s. 79 w.	5					
<i>South Atlantic States.</i>																		
Charlotte, N. C.	21	16	27	10	n. 73 e.	18	Kansas City, Mo.	21	16	10	19	n. 61 w.	10					
Hatteras, N. C.	31	8	9	16	n. 17 w.	24	Springfield, Mo.	21	16	16	16	0	0					
Raleigh, N. C.	27	9	7	21	n. 21 w.	19	Lincoln, Nebr.	25	16	13	14	n. 6 w.	9					
Wilmington, N. C.	18	14	14	17	n. 37 w.	5	Omaha, Nebr.	27	7	7	19	n. 50 w.	16					
Charleston, S. C.	23	9	15	19	n. 16 w.	15	Sioux City, Iowat.	14	6	8	10	n. 14 w.	8					
Augusta, Ga.	23	2	5	32	n. 52 w.	34	Pierre, S. Dak.	23	17	21	16	n. 45 e.	7					
Savannah, Ga.	23	12	10	19	n. 39 w.	14	Huron, S. Dak.	23	18	16	14	n. 22 e.	5					
Jacksonville, Fla.	22	11	14	22	n. 36 w.	14	Yankton, S. Dak.†	10	3	7	15	n. 49 w.	11					
<i>Florida Peninsula.</i>																		
Jupiter, Fla.	21	10	11	26	n. 54 w.	19	Harre, Mont.	17	11	13	29	n. 69 w.	17					
Key West, Fla.	24	6	26	1	n. 54 e.	31	Miles City, Mont.	19	25	10	15	s. 40 w.	8					
Tampa, Fla.	30	5	11	21	n. 22 w.	27	Helema, Mont.	10	29	4	32	s. 56 w.	34					
<i>Eastern Gulf States.</i>																		
Atlanta, Ga.	18	8	20	17	n. 17 e.	10	Rapid City, S. Dak.	15	15	11	28	w.	17					
Pensacola, Fla.	23	14	20	14	n. 87 e.	10	Cheyenne, Wyo.	22	8	3	27	n. 60 w.	28					
Mobile, Ala.	24	18	14	13	n. 9 e.	6	Lander, Wyo.	12	25	14	21	s. 28 w.	15					
Montgomery, Ala.	19	12	22	16	n. 41 e.	9	North Platte, Nebr.	22	14	6	29	n. 71 w.	24					
Vicksburg, Miss.	20	23	15	11	n. 59 e.	5	<i>Middle Slope.</i>											
New Orleans, La.	20	16	18	18	n. 51 e.	6	Denver, Colo.	16	21	15	18	s. 31 w.	6					
<i>Western Gulf States.</i>																		
Shreveport, La.	17	18	24	13	s. 58 e.	43	Pueblo, Colo.	21	9	15	20	n. 23 w.	18					
Fort Smith, Ark.	16	7	23	16	n. 38 e.	11	Concordia, Kans.	22	23	9	15	s. 72 w.	6					
Little Rock, Ark.	15	13	16	23	n. 74 w.	7	Dodge City, Kans.	19	20	12	15	n. 16 w.	3					
Corpus Christi, Tex.	18	17	30	2	n. 88 e.	28	Wichita, Kans.	25	18	10	12	n. 27 w.	7					
Galveston, Tex.	17	24	23	4	s. 70 e.	30	Oklahoma, Okla.	26	20	8	11	s. 27 w.	7					
Palestine, Tex.	21	24	12	11	s. 18 e.	3	<i>Southern Slope.</i>											
San Antonio, Tex.	27	17	24	3	n. 65 e.	23	Abilene, Tex.	21	25	6	16	s. 68 w.	11					
<i>Ohio Valley and Tennessee.</i>																		
Chattanooga, Tenn.	20	13	16	23	n. 45 w.	10	Amarillo, Tex.	20	21	4	15	s. 85 w.	11					
Knoxville, Tenn.	19	19	10	23	w.	12	<i>Southern Plateau.</i>											
Memphis, Tenn.	18	17	22	13	n. 84 e.	9	El Paso, Tex.	21	6	17	25	n. 58 w.	9					
Nashville, Tenn.	20	21	18	18	n. 79 w.	5	Santa Fe, N. Mex.	25	11	18	12	n. 28 e.	15					
Lexington, Ky.	7	25	15	22	s. 21 w.	19	Phoenix, Ariz.	18	4	15	23	n. 30 w.	16					
Louisville, Ky.	10	25	12	21	s. 31 w.	18	Yuma, Ariz.	25	8	18	18	n. 16 e.	18					
Evansville, Ind.	6	8	5	12	s. 74 w.	3	<i>Middle Plateau.</i>											
Indianapolis, Ind.	14	23	6	23	s. 62 w.	19	Carson City, Nev.	14	14	16	25	w.	9					
Cincinnati, Ohio	12	22	17	20	s. 17 w.	10	Winnebucca, Nev.	12	16	17	18	s. 14 w.	1					
Columbus, Ohio	8	20	14	23	s. 37 w.	15	Salt Lake City, Utah.	16	16	20	18	e.	2					
Pittsburg, Pa.	6	23	12	21	s. 28 e.	19	<i>Northern Plateau.</i>											
Parkersburg, W. Va.	17	20	21	17	s. 53 e.	5	Baker City, Oreg.	7	33	20	9	s. 23 e.	28					
<i>Lower Lake Region.</i>																		
Buffalo, N. Y.	9	23	11	25	s. 45 w.	20	Idaho Falls, Idaho.	20	26	4	10	s. 45 w.	8					
Oswego, N. Y.	13	26	19	13	s. 25 e.	14	Spokane, Wash.	3	29	20	9	s. 22 e.	29					
Rochester, N. Y.	12	22	11	28	s. 60 w.	20	Walla Walla, Wash.	5	13	5	14	s. 48 w.	12					
Erie, Pa.	12	27	6	22	s. 47 w.	22	<i>North Pacific Coast Region.</i>											
Cleveland, Ohio	10	28	15	19	s. 13 w.	18	Port Canby, Wash.	2	26	25	10	s. 47 w.	20					
Sandusky, Ohio	12	23	4	30	s. 69 w.	28	Port Angeles, Wash. *	7	3	11	14	n. 37 w.	5					
Toledo, Ohio	14	23	7	25	s. 63 w.	20	Seattle, Wash.	6	39	18	7	s. 18 e.	35					
Detroit, Mich.	15	23	8	23	s. 62 w.	17	Tacoma, Wash.	7	22	7	23	s. 47 w.	22					
<i>Upper Lake Region.</i>																		
Alpena, Mich.	17	19	12	22	s. 79 w.	10	Tatoosh Island, Wash.	6	23	20	15	s. 16 e.	18					
Grand Haven, Mich.	18	20	20	15	s. 68 e.	5	Portland, Oreg.	9	23	17	8	s. 33 e.	17					
Marquette, Mich.	21	16	9	19	n. 63 w.	11	Roseburg, Oreg.	6	29	17	16	s. 2 w.	23					
Port Huron, Mich.	14	27	11	19	s. 32 w.	15	<i>Middle Pacific Coast Region.</i>											
Sault Ste. Marie, Mich.	18	12	21	18	n. 27 e.	7	Eureka, Cal.	16	23	21	11	s. 55 e.	12					
Chicago, Ill.	17	18	9	21	s. 65 w.	12	Redbluff, Cal.	27	15	9	18	n. 37 w.	15					
<i>South Pacific Coast Region.</i>																		
Fresno, Cal.	21	10	15	21	s. 59 w.	21	Sacramento, Cal.	19	26	14	10	s. 30 w.	8					
Los Angeles, Cal.	16	9	13	13	s. 62 w.	16	San Francisco, Cal.	12	18	7	23	s. 75 w.	23					
San Diego, Cal.	28	8	14	21	s. 53 w.	25	San Luis Obispo, Cal.	25	16	3	15	n. 39 w.	14					
<i>North Pacific Coast Region.</i>																		
San Luis Obispo, Cal.	25	16	3	15	s. 62 w.	25	<i>South Pacific Coast Region.</i>											
Fresno, Cal.	21	10	15	24	s. 59 w.	24	Port Angeles, Wash.	16	9	13	26	n. 62 w.	15					
Los Angeles, Cal.	16	9	13	13	s. 62 w.	16	Seattle, Wash.	16	9	13	26	n. 19 w.	21					
San Diego, Cal.	28	8	1															

TABLE VIII.—*Thunderstorms and auroras, February, 1898.*

States.	No. of stations.	Total.																																		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	No.	Days.		
Alabama.....	55	T.																																23	6	T.
Arizona.....	56	T.																																0	0	A.
Arkansas.....	59	T.																															1	0	T.	
California.....	180	T.																															32	6	A.	
Colorado.....	72	T.																															14	5	A.	
Connecticut.....	21	T.																															1	2	T.	
Delaware.....	5	T.																															0	0	T.	
Dist. of Columbia	4	T.																															0	0	T.	
Florida.....	45	T.																															14	4	T.	
Georgia.....	55	T.	1																													9	6	A.		
Idaho.....	38	T.	1																1													2	2	T.		
Illinois.....	86	T.																	1												2	2	A.			
Indiana.....	57	T.																	1												4	2	T.			
Indian Territory.	7	T.																	2												0	0	A.			
Iowa.....	120	T.																	2												3	0	T.			
Kansas.....	85	T.																	2												1	1	A.			
Kentucky.....	48	T.																	1												18	0	T.			
Louisiana.....	46	T.																	1												58	11	A.			
Maine.....	18	T.																	1												0	0	T.			
Maryland.....	40	T.																	1												1	1	A.			
Massachusetts....	59	T.																	1												13	0	T.			
Michigan.....	104	T.																	1												0	0	T.			
Minnesota.....	67	T.																	6												18	0	T.			
Mississippi.....	43	T.																	1												35	8	A.			
Missouri.....	95	T.																	1												50	11	A.			
Montana.....	40	T.																	1												0	0	T.			
Nebraska.....	144	T.	1																1												18	15	A.			
Nevada.....	50	T.																	2												3	2	T.			
New Hampshire.	21	T.																	3												3	3	A.			
New Jersey.....	51	T.																	1												9	1	T.			
New Mexico.....	34	T.																	2												12	1	A.			
New York.....	113	T.																	1												3	3	T.			
North Carolina..	57	T.																	1												13	0	A.			
North Dakota...	52	T.																	4												20	7	A.			
Ohio.....	134	T.																	2												31	7	A.			
Oklahoma.....	21	T.																	1												11	2	A.			
Oregon.....	72	T.																	1												10	1	T.			
Pennsylvania....	105	T.	1																3												13	3	A.			
Rhode Island....	8	T.																	1												3	2	T.			
South Carolina..	40	T.																	1												4	2	A.			
South Dakota....	56	T.																	4												0	0	T.			
Tennessee.....	59	T.																	1												12	5	A.			
Texas.....	89	T.																	1												45	13	A.			
Utah.....	38	T.																	12												0	0	T.			
Vermont.....	14	T.																	9												0	0	T.			
Virginia.....	48	T.																	3												10	2	T.			
Washington....	50	T.																	1												3	0	A.			
West Virginia...	33	T.																	1												11	5	A.			
Wisconsin.....	60	T.																	2												0	0	A.			
Wyoming.....	17	T.																	1												2	0	A.			
Sums .....	2,871	T.	1	1	0	1	3	4	7	11	74	29	19	3	3	11	20	4	21	15	78	77	11	3	4	2	14	43	32	1	0	0	0	492	95	T.

TABLE IX.—*Average hourly sunshine (in percentages), February, 1898.*

Stations.	Instrument.	Percentages for each hour of local mean time ending with the respective hour.														Hours of sunshine.						
		A. M.							P. M.							Total.		Personal esti- mate.				
		5	6	7	8	9	10	11	Noon	1	2	3	4	5	6	7	8	Actual.	Possible.	Percent of possible.		
Albany, N. Y.	T.	15	14	30	38	58	61	68	65	61	43	30	27	.....	.....	.....	.....	136.6	295.4	46	30	
Atlanta, Ga.	T.	45	46	48	52	60	60	58	58	55	58	61	59	.....	.....	.....	.....	170.6	307.1	56	57	
Atlantic City, N. J.	P.	69	70	66	72	75	71	67	63	69	72	68	68	.....	.....	.....	.....	208.5	300.8	69	60	
Baltimore, Md.	T.	36	33	55	70	81	87	88	82	74	63	48	42	.....	.....	.....	.....	199.0	300.8	66	56	
Binghamton, N. Y.	T.	3	18	19	39	57	61	61	49	39	32	28	18	.....	.....	.....	.....	113.0	296.5	38	34	
Bismarck, N. Dak.	P.	94	73	68	72	69	69	68	65	58	55	51	58	.....	.....	.....	.....	186.0	288.7	64	58	
Boston, Mass.	T.	48	38	45	46	55	61	55	57	55	46	32	26	.....	.....	.....	.....	142.3	296.5	48	41	
Buffalo, N. Y.	T.	15	5	14	21	50	64	65	54	42	31	9	4	.....	.....	.....	.....	102.8	295.4	35	21	
Charleston, S. C.	T.	51	57	64	72	79	82	78	71	65	60	60	60	.....	.....	.....	.....	215.1	308.3	70	66	
Chattanooga, Tenn.	T.	23	29	34	46	47	53	58	59	56	53	50	35	.....	.....	.....	.....	144.0	305.8	47	52	
Cheyenne, Wyo.	P.	47	65	79	84	79	81	70	69	70	63	57	42	.....	.....	.....	.....	208.1	298.4	70	52	
Chicago, Ill.	T.	14	23	37	49	50	61	59	55	46	39	38	32	.....	.....	.....	.....	129.0	296.5	44	43	
Cincinnati, Ohio	T.	10	28	36	40	48	63	68	53	45	43	39	34	.....	.....	.....	.....	135.1	300.8	45	38	
Cleveland, Ohio	T.	0	12	19	26	33	42	37	34	32	25	16	15	.....	.....	.....	.....	79.6	296.5	27	23	
Columbus, Ohio	T.	8	21	34	48	53	54	55	54	51	49	33	25	.....	.....	.....	.....	130.6	299.7	44	33	
Denver, Colo.	P.	58	63	72	81	78	73	74	78	74	75	62	82	.....	.....	.....	.....	219.7	299.7	73	54	
Des Moines, Iowa	T.	62	62	56	59	65	69	62	58	54	52	49	52	.....	.....	.....	.....	178.9	296.5	60	59	
Detroit, Mich.	T.	3	7	18	28	38	41	41	41	36	36	29	21	17	.....	.....	.....	.....	88.4	296.5	30	26
Dodge City, Kans.	P.	73	74	82	85	86	85	78	80	82	77	68	68	.....	.....	.....	.....	236.3	302.3	78	65	
Dubuque, Iowa	T.	24	22	37	53	59	69	70	69	66	41	38	27	.....	.....	.....	.....	148.4	296.5	50	46	
Eastport, Me.	P.	24	25	32	42	42	42	40	42	42	35	24	14	.....	.....	.....	.....	104.0	291.9	36	26	
Erie, Pa.	T.	0	3	14	24	36	46	44	39	30	25	14	15	.....	.....	.....	.....	79.1	296.5	27	19	
Eureka, Cal.	P.	15	19	33	43	40	41	41	41	39	31	19	9	.....	.....	.....	.....	99.0	298.4	33	21	
Fresno, Cal.	T.	40	36	45	73	74	78	78	74	73	64	58	64	.....	.....	.....	.....	198.3	303.3	65	60	
Galveston, Tex.	P.	39	53	68	74	72	76	79	80	78	71	67	60	.....	.....	.....	.....	219.1	313.1	70	62	
Harrisburg, Pa.	T.	63	46	50	65	74	84	87	84	73	62	53	36	.....	.....	.....	.....	198.7	299.7	66	46	
Helena, Mont.	P.	44	35	50	72	64	56	59	60	54	40	28	24	.....	.....	.....	.....	147.4	288.7	51	49	
Huron, S. Dak.	T.	71	44	59	71	76	76	83	85	82	70	69	40	47	.....	.....	.....	.....	198.7	298.8	68	59
Idaho Falls, Idaho	T.	27	22	46	69	83	90	88	81	78	61	55	25	14	.....	.....	.....	.....	182.3	295.4	62	42
Indianapolis, Ind.	T.	18	11	20	49	48	50	50	44	37	22	20	20	.....	.....	.....	.....	101.9	299.7	34	34	
Jacksonville, Fla.*	T.	58	57	75	81	94	97	99	90	86	81	66	68	.....	.....	.....	.....	163.4	203.1	80	65	
Kansas City, Mo.†	P.	29	46	52	58	57	58	64	71	54	49	56	56	60	.....	.....	.....	.....	95.0	168.1	57	54
Key West, Fla.	T.	51	55	65	71	78	82	90	85	79	72	70	65	60	.....	.....	.....	.....	231.8	317.0	73	60
Knoxville, Tenn.	T.	31	43	43	62	70	68	66	67	64	58	55	55	55	.....	.....	.....	.....	179.6	305.0	59	56
Little Rock, Ark.	T.	54	55	57	61	62	69	70	73	73	73	64	64	64	.....	.....	.....	.....	200.2	305.8	65	57
Los Angeles, Cal.	P.	49	56	55	62	76	76	78	76	80	80	70	71	.....	.....	.....	.....	216.2	307.1	70	56	
Louisville, Ky.†	T.	11	12	19	30	30	38	40	44	38	32	28	30	36	.....	.....	.....	.....	79.9	260.9	31	34
Minneapolis, Minn.	T.	43	37	39	47	54	55	50	45	47	39	31	31	36	.....	.....	.....	.....	128.9	291.9	44	31
Nashville, Tenn.	T.	23	40	48	57	63	66	67	58	61	60	56	48	.....	.....	.....	.....	172.1	305.0	56	51	
New Orleans, La.	T.	51	51	62	73	73	86	83	76	88	80	65	61	.....	.....	.....	.....	224.8	312.1	73	72	
New York, N. Y.	T.	35	34	45	62	65	71	62	68	68	64	49	35	.....	.....	.....	.....	171.3	298.4	57	46	
Northfield, Vt.	T.	4	19	30	37	40	40	32	33	32	28	16	15	.....	.....	.....	.....	87.8	298.8	30	28	
Oklahoma, Okla.	T.	73	64	69	74	78	85	86	86	85	82	67	60	.....	.....	.....	.....	238.3	305.6	76	75	
Omaha, Nebr.	T.	56	51	58	66	69	68	74	71	73	68	58	57	.....	.....	.....	.....	194.2	298.4	65	53	
Parkersburg, W. Va.	T.	14	22	22	31	51	52	44	39	34	34	21	20	.....	.....	.....	.....	101.5	300.8	34	26	
Philadelphia, Pa.	T.	55	55	57	64	70	68	74	70	70	59	60	63	.....	.....	.....	.....	198.4	299.7	65	52	
Phoenix, Ariz.	P.	88	88	94	96	97	98	95	99	99	86	80	73	66	.....	.....	.....	.....	271.2	308.3	68	59
Pittsburg, Pa.	T.	0	6	8	21	31	43	43	50	39	39	29	30	25	.....	.....	.....	.....	87.7	298.4	29	25
Portland, Me.	T.	4	18	31	25	30	47	50	54	48	44	31	25	.....	.....	.....	.....	114.3	293.8	39	31	
Portland, Oreg.	T.	0	3	14	31	34	36	45	45	39	21	9	8	.....	.....	.....	.....	78.8	290.4	27	23	
Raleigh, N. C.	T.	33	42	59	72	79	80	82	77	71	64	53	44	44	.....	.....	.....	.....	200.1	305.0	66	55
Rochester, N. Y.	T.	4	11	12	21	26	26	31	29	19	8	5	7	.....	.....	.....	.....	53.0	295.4	18	18	
St. Louis, Mo.	T.	31	35	42	51	58	63	62	59	58	54	50	49	49	.....	.....	.....	.....	157.3	300.8	52	41
St. Paul, Minn.	P.	24	31	44	48	56	47	45	47	49	45	35	33	32	.....	.....	.....	.....	128.7	291.9	44	40
Salt Lake City, Utah.	P.	65	59	59	63	69	66	63	69	70	62	44	43	43	.....	.....	.....	.....	182.8	298.4	61	30
San Diego, Cal.	P.	46	51	65	68	76	86	87	85	79	82	75	70	.....	.....	.....	.....	229.6	308.3	74	70	
San Francisco, Cal.	T.	0	7	28	46	64	76	72	75	76	70	54	18	18	.....	.....	.....	.....	162.3	302.3	54	46
Santa Fe, N. Mex.	P.	59	78	92	91	91	91	89	86	80	81	77	59	59	.....	.....	.....	.....	254.3	305.0	88	72
Savannah, Ga.	P.	55	65	72	76	79	77	72	66	69	51	48	48	48	.....	.....	.....	.....	210.3	309.8	68	63
Seattle, Wash.	T.	0	4	14	26	46	49	52	58	50	34	26	13	13	.....	.....	.....	.....	102.0	286.8	36	28
Spokane, Wash.	T.	0	6	16	40	53	61	66	51	39	29	14	1	.....	.....	.....	.....	105.4	286.8	37	26	
Tacoma, Wash.	T.	19	15	29	43	54	55	51	41	32	16	11	11	.....	.....	.....	.....	97.3	288.7	84	20	
Tampa, Fla.	T.	61	65	70	75	80	78	79	81	74	66	68	69	100	.....	.....	.....	228.2	314.1	73	72	
Vicksburg, Miss.	T.	51																				

TABLE X.—Accumulated amounts of precipitation for each 5 minutes, for storms in which the rate of fall equaled or exceeded 0.25 in any 5 minutes, or 0.75 in 1 hour during February, 1898, at all stations furnished with self-registering gauges.

Stations.	Date.	Total duration.		Total am't of precipi- tation.	Excessive rate.		Amount be- fore exces- sive began.	Depths of precipitation (in inches) during periods of time as indicated.													
		From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
		1	2	3	4	5	6	7													
Albany, N. Y.																					
Atlanta, Ga.	17-18			0.33																0.13	
Atlantic City, N. J.	19-20			1.49															0.45		
Baltimore, Md.	20-21			0.27															0.13		
Binghamton, N. Y.	20-21			0.61															0.10		
Bismarck, N. Dak.*																					
Boston, Mass.	20-22			3.17															0.24		
Buffalo, N. Y.	11-12			0.61															0.16		
Cairo, Ill.	17			0.46															0.16		
Charleston, S. C.	27			0.36															0.12		
Chicago, Ill.	11			0.38															0.13		
Cincinnati, Ohio	11			0.99															0.75		
Cleveland, Ohio	20-21			0.91															0.17		
Columbia, Mo.	9			0.95															0.46		
Columbus, Ohio	11			0.47															0.24		
Denver, Colo.*																					
Des Moines, Iowa	9-10			0.46															0.15		
Detroit, Mich.	19-20			0.42															0.18		
Dodge City, Kans.*																					
Duluth, Minn.*																					
Eastport, Me.*																					
Erie, Pa.	11-12			0.74															0.22		
Fresno, Cal.	5-6			0.49															0.21		
Galveston, Tex.	10	1.26 p.m.	4.42 p.m.	1.72	3.40 p.m.	4.20 a.m.	0.77	0.08	0.15	0.21	0.42	0.69	0.76	0.86	0.93						
Do.	23-24	11.05 p.m.	2.27 a.m.	0.72	1.02 a.m.	1.11 a.m.	0.02	0.14	0.41	0.58											
Harrisburg, Pa.	20-21			0.88															0.21		
Hatteras, N. C.	18-19			0.86															0.13		
Huron, S. Dak.*																					
Idaho Falls, Idaho*																					
Indianapolis, Ind.	19			0.48															0.22		
Jacksonville, Fla.	19-20			0.61															0.05		
Jupiter, Fla.	3-4			0.50															0.34		
Kansas City, Mo.*																			0.26		
Key West, Fla.	28			0.14															0.28		
Knoxville, Tenn.	20			0.22															0.12		
Lincoln, Nebr.*																					
Little Rock, Ark.	10-11			0.71															0.30		
Los Angeles, Cal.	7			0.23															0.05		
Louisville, Ky.	11			0.61															0.34		
Memphis, Tenn.	26			0.72															0.70		
Milwaukee, Wis.	*																				
Montgomery, Ala.	11			0.60																	
Nantucket, Mass.	19-20			0.89																	
Nashville, Tenn.	11			0.48																	
New Orleans, La.	11	4.50 a.m.	11.00 a.m.	1.26	5.24 a.m.	5.43 a.m.	0.03	0.08	0.28	0.43	0.48	0.53									
New York, N. Y.†	18-19			0.92															0.14		
Norfolk, Va.																					
Northfield, Vt.*																					
Oklahoma, Okla.	9	7.45 a.m.	10.30 p.m.	2.35	6.53 p.m.	7.35 p.m.	1.38	0.10	0.22	0.33	0.44	0.57	0.67	0.73	0.77						
Omaha, Nebr.*																					
Parkersburg, W. Va.	20			0.32															0.08		
Philadelphia, Pa.	18-20			2.46															0.70		
Pittsburg, Pa.	20-21			0.70															0.13		
Portland, Me.*																					
Portland, Oreg.†	20			0.57															0.15		
Raleigh, N. C.	18			0.17															0.05		
Richmond	18-19			0.53															0.10		
Rochester, N. Y.*																					
St. Louis, Mo.	10-11			0.76															0.27		
St. Paul, Minn.	10			0.77															0.30		
Salt Lake City, Utah*																					
San Diego, Cal.†	24			0.66															0.10		
San Francisco, Cal.	24			0.96															0.20		
Savannah, Ga.	27			0.23															0.17		
Seattle, Wash.	6			0.55															0.60		
Spokane, Wash.																			0.51		
Tampa, Fla.	18			0.23															0.20		
Vicksburg, Miss.	10-11			0.20															0.66		
Washington, D. C.	15			2.15																	
Wilmington, N. C.	18-19																				
Yankton, S. Dak. *																					

\* Record incomplete on account of snow.

† Self-register out of order.

TABLE XI.—*Excessive precipitation, by stations, for February, 1898.*

Stations.	Monthly rainfall 10 inches, or more.	Rainfall 2.50 inches, or more, in 24 hours.		Rainfall of 1 inch, or more, in one hour.	
		Amt.	Day.	Amt.	Time.
Alco.		Inches.	3.35	11	Ins. h.m.
Mobile				2.00	1 00
Pocahontas	Arkansas.		2.80	26	
Bear Valley	California.	10.44			
Bowmans Dam		12.23			
Crescent City		13.00			
Edmonton		12.74	3.10	24	
Fort Ross		12.94	6.50	6-7	
Do.			2.57	24	
La Porte		13.04			
Los Gatos			2.80	24	
Malakoff Mine		13.03			
Quincy		10.08	2.68	7	
Redbluff					
Upper Mattole		22.25	4.00	7	1.08 0 40
Do.			2.90	21	
Do.			4.65	26-27	
Hartford	Connecticut.		2.70	19-20	
Windsor	Florida.		2.74	19-20	
Defuniak Springs			2.75	17	
Lake Butler			3.98	19	
Pensacola	Iowa.		4.25	17-18	
Cedarrapids	Kansas.		2.50	9	
Rome			2.58	9-10	
Wichita	Louisiana.		3.04	9	1.20 1 00
Amite			4.30	10-11	
Baton Rouge			2.73	10	
Elm Hall			3.00	17	
Franklin			2.60	17	
Houma			2.60	11	
Do.			3.00	17	
Jeanerette			2.88	10	
Lawrence			5.75	17	
Mansfield			2.85	10	
Melville			2.70	10-11	
New Orleans			2.78	17	
Port Eads			3.70	17	
Paincourtville			2.80	17	
Rayne			2.55	10-11	
Shellbeach			2.60	16	
Do.			2.55	27	
Southern University		12.50	6.75	11	
Do.			3.30	17	
Sugar Experiment Station			3.35	17	
Venice			5.10	17	
Wallace	Maine.		2.97	17	
Bar Harbor			2.80	1	
Do.			4.20	15-16	
Belfast		11.35	6.70	21-23	
Cumberland Mills			3.00	22	
North Bridgton			2.53	20-21	
Orono			5.17	22-23	
Portland	Massachusetts.		3.06	21-22	
Attleboro			3.96	25	
Fallriver			2.99	22	
Mansfield			2.98	20-21	
New Bedford			2.75	21	
Roxbury			2.88	21	
Taunton	Mississippi.		4.00	20-21	
Bay St. Louis			2.77	18	
Logtown			2.50	17	
Magnolia	Missouri.		3.36	10-11	
New Palestine			2.90	9	

TABLE XI.—*Excessive precipitation—Continued.*

Stations.	Monthly rainfall 10 inches, or more.	Rainfall 2.50 inches, or more, in 24 hours.		Rainfall of 1 inch, or more, in one hour.	
		Amt.	Day.	Amt.	Day.
Asbury Park	New Jersey.	Inches.	Inches.	Ins. h.m.	
Bayonne		2.89	20		
Belvidere		3.11	20		
Camden		2.58	19-20		
Englewood		3.04	19-20		
Friesburg		2.91	20		
Oceanic		2.66	19		
Toms River		3.90	20		
		4.06	19-20		
Lake George	New York.			2.97	1
Middletown				3.51	22
New York				2.84	19-20
Setauket				2.62	19-20
Westpoint				2.80	19-20
Anadarko	Oklahoma.			4.10	9
Arapaho				2.54	9
Edmond				3.25	9
Fort Reno				6.34	9-10
Guthrie				3.30	9
Hennessey				2.95	9
Jefferson				2.55	9
Kingfisher				4.03	9
Mangum				3.38	9-10
Newkirk				3.08	9
Stillwater				3.00	9
Waukomis				3.25	9
Winnview				3.55	9-10
Astoria	Oregon.			14.61	2-63
Bay City				29.39	5
Do.				2.50	7
Cascade Locks				14.48	
Falls City				12.65	
Gardiner				13.25	2-55
Glenora				23.86	5-7
Government Camp				12.94	
Langlois				22.12	7.01
Do.					3.40
Newport				13.01	
Toledo				10.60	
Browers	Pennsylvania.			2.55	20
Coopersburg				2.51	20
Easton				2.65	20
Forks of Neshaminy				2.68	20
Philadelphia (V. O.)				2.53	19-20
Swiftwater				2.60	20
Bristol	Rhode Island.			2.75	21
Kingston				6.69	20-21
Narragansett Pier				5.05	20-21
Brenham	Texas.			4.25	10
College Station				3.82	9-10
Galveston					1.02 1 00
Huntsville				2.50	10
Luling				3.90	9-10
Palestine				3.74	9-10
Rheinland				2.57	9
Aberdeen	Washington.			14.42	
Ashford				11.06	
Clearwater				25.05	2-67
Do.					3.05
Fort Canby				12.49	
Lapush				16.46	
Northbend				10.92	
Pysht				11.97	
Southbend				16.57	2.52
Tatosh Island				17.51	5
Union City				16.80	3.25

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